PRESERVED

App. F. IX-4

1928 ( )

File No. 64-28

Previous References
G.V. 46-27 (1-1)

Serial Nos. 1-8

Later References
G.V. 64-28-(4-6)
" 64-28 (7-9)
" 37-29 (1-5, 13, 14)

P-64/2-F

General and Revenue Secretariat.

Serial Nos. Blank

Part B for March 29

SUBJECT

Administration Report of the Civil Veterinary Department for 1928.

D 6425-13 M 22-12-28

To Dir of Agriculture, Pun. Comm.
Head of Delhi
Dy. Comm. of the
Presidency Boards

Reviews the

Telegraphic Address "Agri., Bangalore."
Code—5th Edition A. B. C.

DEPARTMENT OF AGRICULTURE,
MYSORE STATE.

REV. SECRETARIAT
DEVELOPMENT BRANCH

In reply please quote in full the Nos. and indicative symbol given below.
~~Per 45/28-29.~~ E/3 Reports & an introductory note 3968

BANGALORE, November 20, 1928.

FROM

LESLIE C. COLEMAN, ESQ., M.A., PH.D.,
DIRECTOR OF AGRICULTURE IN MYSORE,
BANGALORE.

To

N. Rama Rao, Esq., B.A., B.L., C.V. 64-28-1
Secretary to the Government of Mysore,
Development Departments, Bangalore.

SIR,

In forwarding herewith the Annual Report of the Civil Veterinary Department for the year 1927-28 together with an Introductory Note, I have the honour to express regret at the delay. This is due to the fact that the report reached my office only on the 7th of this month.

I have the honour to be,
Sir,
Your most obedient servant,

Director of Agriculture.

Serial No.

2

To the Director of Agriculture
" Rev. Commr
" Heads of Depts
" Dcs of Distts
" The Presidents of Distt Bds.

D 6425-83 & 22/12/28

Reviews the report on the working of the CV Deptt for 1927-28

Subd[15] with a D.F.N.

Zad
5/1/29

2nd Member[16] ~~[illegible]~~

Cen
6/1

[17] Final note signed by the Member is placed below.

Hm
10/1/29

[18] Subd with S.N.

10/1/29

Cen
11

[19] Subd with a D.S.N.

Zad
11/1

Dewan

Cen
21.1.29

Hm
22-1-29

OFFICE OF THE SECOND MEMBER OF COUNCIL
10 JAN. 1929
No. 5-15

DEWAN'S OFFICE
22 JAN. 1929
No. 3258

NOTE.—Contn. sheet

WD 021—GPB—30,000—21-8-28

3968 (2

App. F. III—2]

General and Revenue Secretariat. C. V. File No. 64 of 1928-29

Serial No.

2 (a) To

The Supdt., Govt. Printing, Barga

No. D. 5299 dt 21st Nov 1928

Forwards a typed copy of the report in question with its annexure for being set in type and proofs being furnished to the Supdt. C.V. for approval.

Resubmitted, as directed in para 6 supra, with a draft review for consideration

SDT 22.11.28

Please put up a typed draft.

VS 28.11.28

9 Typed draft put up.

KS. 28.11.28

SDT 10 Secy D) VS 29.11.28

11 Please type as revised

AK 3/12/28

12 Typed draft put up.

VS

13 Secy D) VS

14 For appl 5.12.28

Issue AK 4/12/28

NOTE—Contn. Sheet.

Member

Dewan

CSY AK 6/12/28

VS 7/12/28

LEWINS OFFICE. 13 DEC. 1928 No. 2961

OFFICE OF THE SECOND MEMBER OF COUNCIL 6 DEC. 1928 No. 4364

WD 01714—GPE—30,000—18-4-29

Final Note by the Second Member of Council.

Subject:— Review on the Report on the working of the Civil Veterinary Department, Mysore, for the year 1927-28.

I submit herewith for the gracious perusal of His Highness the report on the working of the Civil Veterinary Department for 1927-28 and the Government Review thereon.

C S Balasundaramayya

MEMBER OF COUNCIL.

Bangalore,
10th January 1929.

Submitted to His Highness.

I submit herewith a Final Note by the Second *Member of Council on the subject of* the Report on the working of the Civil Veterinary Department, Vepery, for the year 1927-28, *for His Highness' gracious approval.* perusal.

Mirza M. Ismail
Dewan.
22.1.29

Record of Cases submitted for the Orders of His Highness the Maharaja.

Subject.

Report on the working of the Civil Veterinary Department, Mysore, for the year 1927-28.

Order.

Serial No.

Subd with draft forwarding four copies to the Residency.
Issue
25/3 20/3

3 Rec'd letter to the Hon'ble the Resident PR 1982 of 29.3.29, forwards four copies of the report—

GEN. & REV. SECRETARIAT
30 MAR 1929
DEVELOPMENT BRANCH

28/3

THE ANNUAL REPORT OF THE MYSORE CIVIL VETERINARY DEPARTMENT FOR THE YEAR 1927-1928

ADMINISTRATIVE STAFF

Major R.W. Simpson, Superintendent, was in charge for the whole period. Mr. K. Krishnaiengar, Assistant Superintendent, continued in charge of the Eastern Division, with his headquarters at Bangalore. Mr. M.N. Srenivasan, Assistant Superintendent, also continued in charge of the Western Division for ten months, with his headquarters at Shimoga, when he availed himself of two months' privilege leave, and Mr. B.V. Venkatachar, Veterinary Officer, Bangalore, was appointed to act for him.

SEASONAL CONDITIONS

The seasonal conditions were on the whole fair. There was a certain amount of scarcity of fodder and water in parts of the Madhugiri, Sira and Tiptur Taluks in the Tumkur District; and in parts of Gundlupet, Yedathore, Malvalli and Nagamangala Taluks in the Mysore District. Scarcity of fodder for two months, owing to a late North East monsoon, was also keenly felt in the Chitaldrug District.

CONTAGIOUS DISEASES

The year opened with 68 outbreaks of rinderpest, 33 of anthrax, 15 of haemorrhagic septicaemia, 477 of blackquarter, and 180 of other contagious diseases requiring attention.

During the year 1,186 fresh outbreaks of rinderpest, 2,038 of anthrax, 463 of haemorrhagic septicaemia, 1,505 of blackquarter, and 2,997 of other contagious diseases were registered.

The staff were only able to personally attend to 618 outbreaks of rinderpest, 425 of anthrax, 116 of haemorrhagic septicaemia, 1,503 of blackquarter, and 633 of other contagious diseases. In 1,613 outbreaks of anthrax, 342 of haemorrhagic septicaemia, 1655 of other contagious diseases, written instructions were sent to the Patels of villages concerned, instructing them of the precautions they should take and that they should report progress of disease.

RINDERPEST - At the beginning of the year under reference rinderpest was prevailing only in most of the Taluks in the Mysore District, in three Taluks in each of the Hassan and Shimoga Districts, and in two Taluks in the Kadur District, but during the course of the year it spread to every Taluk in the State, principally through cattle dealers from the Madras Presidency purchasing large numbers of cattle cheaply in infected areas and marching them through the State into British Territory. Although some of the cattle dealers were warned of the presence of rinderpest in the area in which they were purchasing cattle, they nevertheless continued to do so. Several outbreaks of rinderpest 150 miles away were subsequently traced to the infection carried by the cattle purchased by these men. Conditions were aggravated with the increased movement of cattle to and from Cattle Fairs. In areas where there is a Veterinary Inspector to each Taluk, the disease was promptly dealt with, and so kept in hand, but in areas where a Veterinary Inspector has more than one Taluk to attend to, the disease got out of hand, and this accounts for the unprecedented number of villages infected in the State. This bears out my repeated statements that it would be more economical in the long run to have a Veterinary Inspector to each Taluk, with a reserve of men to assist him in cases of emergency. It is of interest to note that though rinderpest again appeared during the year in several villages, where S.S. inoculation had been undertaken in 1925, only two of the S.S. inoculated cattle showed symptoms of the disease and then only in a very mild form.

During the year 72,536 animals were protected against rinderpest by active immunisation and 100 by passive immunisation. The number protected would have been much larger had the supply of serum been equal to the demand. Active immunisation against rinderpest has been universally adopted in the State, and has given most satisfactory results. The people have begun to realise its efficacy, and those who refuse to produce their cattle for inoculation in the first instance, soon come to their senses, when they find their cattle dying, while the inoculated remain healthy.

The success attending this inoculation has undoubtedly brought the work of the Department into prominence, and has greatly helped to gain the confidence of the Agricultural population. It has been found more satisfactory to give a smaller dose of serum and have a slight thermal reaction, than to give a large block-out dose followed with no reaction, especially in cases where controls cannot be had, and the people are often indifferent as to whether the second injection is given or not. See appendix 8 for the form used for collecting statistics showing the results of this method of inoculation.

Working in already infected villages it must often happen, especially as the temperatures of all the cattle cannot be taken before inoculation on a large scale by one man and his assistant - that animals already infected with the disease, get inoculated; so animals showing a reaction before 96 hours after inoculation, are considered as infected at the time of inoculation. From statistics collected, the following are the results of S.G. inoculation.

Attacks and deaths from rinderpest in Villages where S.S. Inoculation has been undertaken		Number Inoculated	Result among the inoculated							
Attacks	Deaths		Reactors within 4 days of inoculation	Deaths	Reactors between 4th and 7th day.	Deaths	Reactors between 7th and 14th day of inoculation.	Deaths	Attacks after the 14th day.	Deaths
1	2	3	4	5	6	7	8	9	10	11
15,449	6,822	72,536	459	73	2,357	40	1,254	29	140	23

The figures given in columns 6 and 8 include animals that have shown either slight or severe reactions. If the deaths among the animals that reacted within four days of inoculation are not taken into consideration, the deaths among the inoculated work out to less than one per cent. When animals develop the disease after the 14th day after the first inoculation, it shows that inoculation has been a failure, and this is probably due to the virus being defective. Such cases are shown as attacks after inoculation.

Total number of deaths from rinderpest, according to Cattle Mortality Returns received from Patels, is 14,891 against 12, 321 of the previous year, but this cannot be taken as a correct figure, as 50% of the Patels do not submit these returns regularly, and several of the Patels who do so, do not record all the deaths that do occur. The number recorded could, without exaggeration, be doubled.

ANTHRAX - Very little attention could be paid to this disease, other than sending written instructions to Patels of Villages where there had been deaths, as the staff were fully occupied dealing with rinderpest.

Until the staff is considerably increased it will not be possible to carry out preventive inoculation against anthrax on a large scale, and so reduce the high mortality from this source.

The Australian Spore Vaccine prepared by the Biological Institute of Australia, Sydney, continues to be used, and the results obtained among cattle so inoculated, are very encouraging. There have been no further deaths from Anthrax on the Rayankeri Dairy Farm, since the cattle were protected in February 1927, where previous to this vaccination, deaths occurred at frequent intervals. Occasionally an animal develops anthrax from 24 to 96 hours after vaccination, but every such case has been promptly treated with an intravenous injection of the Lukteesar anti-anthrax serum and cured.

The mortality, after vaccination among sheep and goats varies from 5 to 15 per cent, but as this is slight when compared with the high mortality from the disease itself in infected localities, the people think nothing of it, and are only too pleased to feel the remainder of their flocks are safe.

Experiments with the anti-spore vaccine were tried on horses and elephants. On horses it caused extensive oedematous swelling of the fore limb on the side inoculated, and so it has not been tried since on horses.

The Aggressin prepared by the Jensen Salsbery Laboratories, Kansas City, gave better results, and all the horses of the Mysore Military were during the year protected with it.

The anti-spore vaccine gave better results with Elephants and 7 were protected with it, and for 10 months there have been no further deaths among the elephants in the Shimoga District where previously deaths had occurred in the previous two years. The safe dose for a full grown elephant is 1.5 c.c.

The Aggressin prepared by the Jensen Salsbery Laboratories is to be tried on sheep and goats during the coming year.

BLACKQUARTER - Protective inoculation against blackquarter is becomin more and more popular every year in the State. Where formerly there was opposition to it, complaints are now made by the people if the staff do not promptly visit the villages to undertake inoculation. In areas subject to this disease, the staff now carry in their equipment carry bottles of anti-blackquarter serum in order to give intravenous injections without delay to animals found suffering from the disease. This treatment has been attended with great success, and has done much in enabling the staff to gain the confidence of the people. For protective inoculation the Aggressin only is used. No harm is done by using the Aggressin where the disease exists if serum is available for intravenous injections in case the inoculated animals develop the disease.

The high mortality from anthrax and blackquarter is a considerable loss not only to the cattle owners, but also to the State, as it is only the better cared for and more valuable animals that appear to contract these diseases. This is the class of animal that is purchase by people outside Mysore, and so every animal thus lost, means so much less money coming into the State.

Unfortunately the Districts where these diseases occur periodicall and cause such heavy mortality are poorly staffed, and in consequence

consequence protective inoculation can only be undertaken to a limited extent.

It will thus be seen that it would be really economical in the long run if the State spent more money in protecting more of these valuable cattle, which are a considerable source of income to the State. This can be done by increasing the staff considerably, by having at least a Veterinary Inspector in each Taluk with an ample supply of vaccine always in stock, so that all the young stock can be protected.

HAEMORRHAGIC SEPTICAEMIA - Very little attention could be paid to this disease. Of the 463 outbreaks registered during the year, only a hundred and eighteen received attention, owing to the area allotted to each Veterinary Inspector being too extensive to enable him to cope with the numerous outbreaks occurring in his area. Besides, insufficient funds not being provided, it was not possible to lay in sufficient vaccine to meet the large and continual demand.

OTHER CONTAGIOUS DISEASES - Foot and mouth disease spread to all the Districts in the State and was responsible for the high mortality in some of the Malnad Taluks. Sheep-pox as usual accounted for the heavy mortality among sheep in the Eastern Districts. Unfortunately, owing to the staff having rinderpest and other outbreaks to deal with, very little attention could be paid to this disease. In one village in the Bangalore Taluk, cow-pox lymph was tried with satisfactory results. Parasitic diseases seem to be getting steadily worse, and are largely responsible for retarding the development of the young stock, and for the poor condition of the older stock. More attention should be given to these diseases, but with the present staff this is impossible.

PERSONNEL.

The staff have, as a whole, done another year of splendid work, notwithstanding the fact that a number of them have had their constitutions undermined with Malaria working in the unhealthy tracts of the Malnad.

Though Government were pleased to reorganise the Department by increasing the number of Divisional officers by two, and by increasing

increasing the number of Inspectors in the first grade by four, resignations continue. This shows that the reorganisation is apparently not sufficiently encouraging to tempt men to remain. There is also great discontent among the second and third grade Inspectors, as they have been badly hit by the reorganisation. They now get yearly increments of only Rs 4/- as against Rs 5/-, and by Government not giving these men an advanced increment this year, several of them will, according to the Mysore Service Regulations, not draw the pay they were entitled to under the old scale, before July 1930.

There is also much discontent among the lower subordinates, owing to their pay not being improved. At present they are the poorest paid men in the service and with no prospects. This results in their leaving just as they have learnt enough to be useful assistants to to the Veterinary Inspectors. This unsatisfactory state of affairs greatly retards the smooth working of the Department. The people, who in consequence suffer, are the ryots, as they do not get the same attention paid to their live-stock as they would if there was not this continual introduction of untrained and inexperienced men to assist the Inspectors, and to treat animals in the absence of the Inspectors from headquarters.

Five Veterinary Graduates from the Bengal Veterinary College, seven from the Madras Veterinary College and two from the Bombay Veterinary College were entertained. Six Veterinary Inspectors resigned during the year, of whom three had completed two years service. Among these one was a Mysorean.

Six candidates were selected as Mysore stipendiary students to undergo a course of study in the Punjab Veterinary College, Lahore. This made in all 27 students in the Punjab Veterinary College and one in the Bombay College. The student in the Bombay College qualified in April.

The two Veterinary Inspectors deputed for a three years' training, returned in January, and have done some very useful work since.

Hospitals and Dispensaries.

Six dispensaries were opened during the year at Goribidnur, Gundlupet, Channarayapatna, Nelamangala, Hosakote and Kolar. This makes a total of 45 institutions in the State, but more are badly needed, and especially in those places where there is only one institution for two or more Taluks. These institutions serve a very useful purpose, as they are not only places where the ryot gets his animals treated, but is the meeting place of the ryots when they visit the Taluk headquarters on business, and especially on the weekly bazaar days. Thus if the Inspector makes the ryots welcome, and shows an interest in Village matters, their cattle etc, he invariably receives an invitation to visit their villages. Having thus gained thier confidence, he gets immediate information of outbreaks of disease, and meets with no opposition in pushing preventive inoculation and the castration of scrub bulls.

Several of the older institutions still remain very poorly equipped, and such instruments that they do possess, are becoming useless through wear. Liberal grants are required for the re-equipment of these institutions. This state of affairs handicaps work considerably, disheartens the staff, and gives rise to complaints from the people.

Many of the institutions are still located in very unsuitable buildings.

Most of the Local Bodies concerned have agreed to bear their quota for the erection of suitable buildings, but unfortunately Government have not seen their way to provide additional funds as the Provincial quota.

Mr. Yelo Krishnappa of Devanhalli has constructed a substantial and imposing building at Devanhalli, and orders of Government are awaited for the opening of an institution there.

With the exception of the buildings at Tiptur and Channarayapatna, which two Citizens so generously are erecting, the other citizens, who promised to erect buildings in different places, have not done so.

During the year Government have generously come forward to

to bear half the rent of the buildings rented for Dispensaries, where the rent had hitherto been borne entirely by the local bodies concerned.

96,204 fresh cases were treated in Veterinary Institutions against 67,137 of the previous year. 5,807 castrations and 6,145 operations were performed against 3,454 and 5,338 respectively of the previous year. Yet these institutions are not being made as much use of by the people as they should be. The reason is that those who have to bring their animals from a distance, can never be sure of finding the Veterinary Inspector at his institution, as he is more often away than at headquarters, dealing with the numerous outbreaks in the extensive area allotted to him.

If the assistants to the Inspectors were capable and experienced men they would, to a certain extent, be able to attend to the Hospital work during the Inspector's enforced absence, but as already stated, owing to frequent resignations, inexperienced and untrained men have to be employed.

WORK DONE ON TOUR.

The Veterinary Inspectors, again this year, have had very little time for systematic touring owing to the large number of outbreaks, but they nevertheless took full advantage of their stay while in villages attending to outbreaks, to do as much as possible for the ryots by operating on and treating such animals that required attention.

The staff, while on tour, castrated 31,008 animals against 24,658 of the previous year; treated 25,811 against 17,190 of the previous year; and performed 521 operations.

CATTLE FAIRS.

Of 95 Cattle Fairs held in the State, 75 were attended by the staff, and in those places where accommodation was provided, temporary dispensaries were opened. Several of the local bodies responsible for the management of these fairs, did all they could to assist the staff in their work, and to minimise the breaking out of disease among the Cattle.

Rules and regulations are very necessary for the guidance of those responsible for the management of these Cattle Fairs, especially for private individuals who organise and run a few of them and whose one idea is to get some income for a Temple or for themselves, but have little regard for the spread of the disease.

BREEDING BULLS.

There were twelve breeding bulls, and three buffalo bulls stationed in Veterinary Institutions.

The two bulls at Bangalore died during the year, and the bull at Madhugiri was sold.

959 cows and 252 buffalo cows were served during the year.

At present there is a serious shortage of good breeding bulls in the State, owing to all the promising bull calves being purchased and taken out of the State. It is no exaggeration to say that the shortage of good breeding bulls will seriously affect the economical condition of the State in the near future. In a State like Mysore with an extensive export trade in cattle, bringing in nothing less than half a crore of rupees yearly, it is a suicidal policy to neglect this important industry. Every endeavour should be made without delay to improve the breed by the free distribution of ~~nothing less than~~ at least 5,000 young breeding bulls in villages that are prepared to maintain them as breeding bulls.

In order to retain these bulls, it will be necessary for Government to have lean on them, and so prevent them being sold and taken out of the State.

CONFERENCES.

Of the 44 Taluk District and Taluk Conferences held during the year 36 were attended by the staff. Reports on the work done by the Department in Districts and Taluks, were read at these conferences. For the first time in the State, a Poultry Show was organised in connection with the Kadur Conference.

JATKA PONIES.

With the advent of motor buses, Jatka conveyances have practically disappeared. A few still ply for hire between the Kolalkere Railway Station and Kolalkere Town; French Rock Railway Station and Town; and Chintamani and Kolar Towns. The ponies were examined

were examined twice during the year, and most of them were found totally unfit for use, but unfortunately the officers of the Department cannot take action against the offending Drivers, and the Police do not seem to think it their duty to do so. As things stand, these half yearly inspections serve no useful purpose.

EXAMINATION OF BACTERIOLOGICAL & PATHOLOGICAL SPECIMENS.

The Department not having its own laboratory, specimens had to be sent to the Public Health Institute. 555 specimens were examined with the following results:-

No.	Items	Positive	Negative	Total
1.	Piro	64	353	417
2.	B.Q. Ill	5	13	18
3.	Anthrax	23	48	71
4.	H.S.	2	11	13
5.	Jhone's disease	-	1	1
6.	Glanders	1	4	5
7.	Malignant Oedema	5	0	5
8.	Fibro Sarcoma	2	0	2
9.	Tubercular bacill	0	1	1
10.	Gonococci	-	2	2
11.	Trypanosome	2	3	5
12.	Sections	0	7	7
13.	Urine	0	8	8
		104	451	555

J. W. Simpson, Major.

Superintendent.

12 App. I

Statement shewing the work done in the Civil Veterinary Department during the year 1927-28

Sl No.	Particulars			Number
1.	No. of fresh cases admitted to the Institution			96,204
2.	Total of daily attendance for the year ...			2,06,389
3.	No. of castrations performed in the Institutions			5,807
4.	No. of other operations performed in the Institution			6,145
5.	No. of cases treated on tour ...			25,811
6.	No. of castrations performed on tour ...			31,008
7.	No. of other operations performed on tour ...			521
8.	No. of outbreaks of rinderpest pending on 1st July 1928			88
9.	No. of outbreaks of rinderpest registered during 1927-28			1,186
10.	No. of outbreaks of rinderpest attended to during 1927-28			818
11.	No. of outbreaks of rinderpest where inoculation was totally refused			36
12.	No. of outbreaks of Anthrax pending on 1st July 1927			33
13.	do do registered during 1927-28			2,038
14.	do do attended during 1927-28	Personally		425
		By written instruction		1,613
15.	No. of outbreaks of H.S. pending on 1st July 1927 ...			15
16.	do do registered during 1927-28 ...			463
17.	do do attended to during 1927-28	Personally		118
		By written instruction		342
18.	No. of outbreaks of blackquarter pending on 1st July 1927			477
19.	do do registered during 1927-28			1,505
20.	do do attended to during 1927-28			1,503
21.	No. of outbreaks of all other contagious diseases pending on 1st July 1927			180
22.	No. of outbreaks of all other contagious diseases registered during the year 1927-28			2,397
23.	do do attended to during 1927-1928	Personally		833
		By written instruction		1485
24.	Total number of outbreaks that were detected	Personally on tour		346
		By checking C.M.R. in Taluk offices		3,357
25.	do do that were reported through	C.V.D.10.R.		2033
		C.V.D.10.C.		1653

P.T.O.

26. No. of inoculations performed against rinderpest	S.S.method		72,838
	S.A.method		100
27. do	do	Anthrax	6,697
28. do	do	Blackquarter	26,585
29. do	do	Haem. Sept	2,117
30. No. of vaccinations against sheep-pox			178
31. No. of cattle fairs held	...		95
32. No. of cattle fairs attended by the Veterinary Inspectors			75
33. No. of Taluk conferences held	...		44
34. No. of Taluk conferences attended	...	...	36

W. Simpson, Major.

Superintendent C.V.D.

Statement showing the number of outbreaks of epidemic cattle diseases attended to in the State during the year 1927-1928.

Area	Rinder-pest	Anthrax	Haem Sept.	Black-quarter	Other con-tagious diseases	Total for 1927-1928	Total for 1926-1927
Bangalore	37	46	4	30	46	163	147
Anekal -	11	44	4	25	36	120	120
Dodballapur	9	148	14	115	133	419	522
Hoskote	8	37	2	17	23	87	Nil
Channapatna	2	55	12	59	49	177	164
Kankanhalli	15	31	8	45	40	139	105
Magadi	8	46	5	26	43	128	116
Nelamangala	13	16	-	-	9	38	Nil
Mysore	53	122	23	76	73	347	399
Chamarajanagar	83	89	10	9	15	176	258
Gundlupet	13	24	4	1	2	44	Nil
Hunsur	66	47	10	78	94	295	295
Yelandhore	31	19	13	16	112	191	127
Nagamangala	32	43	16	117	103	311	328
Malvalli	16	98	23	94	68	299	319
Tumkur	21	123	16	98	41	299	468
Madhugiri	19	35	7	38	63	162	445
S i r a	4	18	5	14	37	78	65
Tiptur	10	26	7	43	84	172	326
Kolar	23	228	19	71	70	411	509
Chikballapur	11	37	11	84	51	194	205
Chintamani	4	98	17	57	34	210	266
Goribidnur	11	8	2	30	15	66	Nil
Kolar Gold Fields	-	7	1	7	2	17	7
Shimoga	3	74	3	9	72	161	231
S a g a r	8	77	21	14	49	169	301
S o r a b	3	-	-	-	-	3	Nil
Shikarpur	2	54	7	5	27	95	115
Chennagiri	26	117	21	38	35	239	300
THirthahalli	10	14	10	2	20	56	69
Chitaldrug	10	65	7	20	65	167	198

15

Davangere	23	14	2	22	21	82	111
Hosadurga	20	67	2	17	76	202	289
Challakere	9	17	-	17	86	129	108
Jagalur	20	17	3	20	29	89	49
Hassan	8	14	21	86	88	186	314
Sakleapur	53	16	57	22	109	257	451
Arkalgud	16	5	5	20	47	93	160
Holenarsipur	13	2	8	27	52	102	204
Channarayapatna	16	2	5	27	53	103	-
Arsikere	8	10	10	23	30	87	114
Chikmagalur	37	23	12	9	123	204	324
Tarikere	31	12	10	9	44	106	110
Mudigere	-	1	22	-	30	53	69
Koppa	4	-	1	-	10	15	111
Total for the year 1927-1928	818	2,038	460	1,803	2,818	7,137	
Total for the year 1926-27	1,100	2,211	804	2,408	2,437	-	8,657

H. Simpson, Major.

Superintendent.

App. 3

Statement showing the work done in each Veterinary Institution in the State for the year 1927-1928.

Area	Fresh cases admitted	Total attended	Castrations	Operations
Bangalore ...	5765	13,328	153	748
Anekal ...	2404	4,887	286	384
Dodballapur ...	2165	3,704	164	186
Hoskote ...	450	1,104	41	32
Channapatna ...	2322	6,143	213	193
Kankanhalli ...	1008	3,625	57	78
Magadi ...	2427	8,989	211	57
Nelamangala ...	366	1,011	25	40
Mysore ...	3423	8,832	78	343
Chamarajanagar ..	2564	4,445	83	113
Gundlupet ...	2047	2,451	3	14
Hunsur ...	2031	4,978	148	59
Yedathore ...	1105	2,273	104	58
Nagamangala ...	1542	2,811	54	145
Malvalli ...	1637	3,482	100	156
Tumkur ...	5023	11,971	605	396
Madhugiri ...	2069	3,754	338	265
Sira ...	2589	5,223	157	160
Tiptur ...	5008	7,645	221	102
Kolar ...	1125	2,401	99	101
Chikballapur ...	1933	4,239	101	222
Chintamani ...	2473	4,812	104	68
Goribidnur ...	864	2,500	53	67
Kolar Gold Fields	1910	5,516	94	128
Shimoga ...	3645	7,573	104	223
Sagar ...	1248	3,055	16	72
Shikarpur ...	3322	5,951	75	164
Chennagiri ...	3036	7,134	57	113
Sorab ...	51	192	2	16
Thirthahalli ...	1701	3,111	30	50

P.T.O.

Chitaldrug	...	2725	4790	174	162
Davangere	...	1956	5439	122	71
Hosadurga	...	1705	4380	133	87
Challakere	...	2327	3624	247	42
Tagalur	...	814	2219	48	29
Hassan	...	3309	5999	397	151
Saklespur	...	1489	3154	19	47
Arakigud	...	1603	3234	103	93
Helenarsipur	...	2680	5197	267	149
Channarayapatna		1733	3132	189	159
Arsikere	...	2284	6301	191	124
Chikmagalur	...	2729	6381	95	179
Tarikere	...	1917	3926	40	55
Mudigere	...	1489	3992	31	51
K o p p a	...	181	473	10	1
T O T A L		96,204	2,06,389	5,807	6,145
Total for 1926-27		67,137	1,53,265	3,454	5,311

Major.

Superintendent.C.V.D.

Statement showing the number of Inoculations done against Epidemi diseases in the State during the year 1927-1928.

Area	Rinderpest S.S.	Rinderpest S.A.	Black-quarter	Anthrax	Haem. Sept.	Total for 1927-1928	Total for 1926 - 1927.
Bangalore	3048	-	-	590	-	3638	2484
Anekal	3099	-	1032	-	-	4131	2117
Dodballapur	1360	-	1273	37	-	2670	4211
Hoskote	855	-	725	-	-	1580	-
Channapatna	112	-	2404	325	-	2841	4527
Kankanhalli	2807	-	1457	335	-	4599	2393
Magadi	1311	-	1572	-	-	2883	1034
Nelamangala	662	-	-	-	-	662	-
Mysore	7351	-	237	65	-	7653	8923
Chamarajanagar	5178	-	892	-	-	6070	6966
Gundlupet	3083	-	-	-	-	3083	-
Hunsur	5351	-	-	-	-	5351	5249
Nanjanagud	2602	-	-	-	-	2602	1386
Nagamangala	5831	-	1194	193	-	7218	4904
Malvalli	862	-	1910	-	-	2722	2998
Tumkur	2481	-	1868	1114	-	5463	3459
Madhugiri	1412	-	709	760	-	2881	3012
Sira	539	75	120	-	-	734	948
Tiptur	729	-	935	287	-	1951	2224
Kolar	1807	-	448	1327	-	3582	3029
Chikballapur	592	-	1795	-	-	2387	2508
Chintamani	-	-	1176	703	-	1879	4217
Goribidnur	659	-	146	-	-	805	-
Kolar Gold Fields	-	-	280	-	-	280	281
Shimoga	78	-	91	-	-	169	263
Sagar	412	-	-	-	-	412	1185
Sorab	-	-	-	-	-	-	-
Shikarpur	659	-	132	164	205	1160	617
Chennagiri	1910	-	123	-	-	2033	1553
Thirthahalli	727	-	-	-	70	797	1351
Chitaldrug	1055	-	504	-	-	1599	2535

Davangere	815	-	381	-	88	1284	1319
Honnadunga	1623	-	216	-	-	1839	1815
Jagalur	1180	-	135	350	-	1665	951
Chitlakere	821	-	28	-	-	846	3184
Hassan	1227	25	409	154	-	1815	5427
Sakleapur	1398	-	834	152	1858	3339	3899
Arkalgud	1398	-	603	134	-	2135	4292
Holenarsipur	1388	-	455	-	-	1843	4231
Channarayapatna	1895	-	437	-	-	2332	-
Arsikere	368	-	345	-	-	713	2378
Chikmagalur	1924	-	-	-	-	1924	4238
Tarikere	1864	-	80	7	-	1891	964
Mudigere	-	-	-	-	529	529	552
Koppa	62	-	-	-	-	62	-
Total for 1927-1928	72,835	100	34,583	6,697	2,117	1,06,032	
Total for 1926-1927	24,498	24,555	50,521	5,952	2,238	-	1,07,764

H.V. Simpson, Major.

Superintendent.

Statement showing the percentage of Cattle Mortality Returns received from the Patels during the year 1927-1928

Sl No.	Name of District		Percentage of Cattle Mortality Returns received from the Patels	Remarks
1.	Mysore	...	67%	
2.	Bangalore	...	60%	
3.	Tumkur	...	75%	
4.	K o l a r	...	76.5%	Average percentage of returns
5.	Shimoga	...	72.5%	received for the whole State
6.	K a d u r	...	80%	is 75%
7.	H a s s a n	...	61%	
8.	Chitaldrug	...	72%	

J. Thompson, Major.
Superintendent.

App. 6

Statement showing the Cattle Mortality in the State from contagious diseases during the year 1927-1928.

District	Rinderpest	Haemorrhagic Septicaemia	Anthrax	Black-quarter	Foot & Mouth	Surra	Red Water	Parasitic diarrhoea	Other contagious diseases	Total
Bangalore ...	1964	103	807	956	64	1	8	250	213	4,365
Mysore ...	7,187	116	637	589	51	4	3	430	246	9,263
K o l a r ...	950	208	1,009	1,085	81	2	8	67	560	3,970
Tumkur ...	1,758	89	589	992	146	-	15	180	670	4,410
Shimoga ...	946	330	610	225	164	3	3	75	383	2,739
Hassan ...	707	304	109	350	79	6	17	308	94	1,974
K a d u r ...	731	109	66	65	125	1	9	82	98	1,286
Chitaldrug ...	648	16	375	241	247	0	2	72	477	2,078
GRAND TOTAL ...	14,991	1,245	4,302	4,503	957	17	65	1,464	2,741	30,085

J. W. Simpson, Major.

Superintendent.

App. 4

25

Annual Statistic Return of Breeding Bulls maintained in Military Farms

Serial number	Head quarters	No. of sires on hand	No. of bulls condemned during the year	No. of breeding fields	Date of birth of the youngest bull	Date of birth of the oldest bull	No. of days each bull was on duty	At headquarters	On tour	No. of services rendered during the year	Highest No. of services during any one day	Daily average services	No. of cows if any which could not be covered on account of excessive age	Total No. of cows to be served by each bull.	Remarks
1. Bangalore	-	-	E.31	-	-	-	29	-	13	2	-	-	29	Died on 13/5/28
2. "	-	-	16	-	-	-	203	-	61	4	-	-	203	Died on 5/4/28
3. Dodballapur	-	-	1	-	-	-	50	-	10	4	1	-	50	
4. Kolar	-	-	2	-	-	-	97	-	11	3	-	-	97	
5. Tumkur	-	-	Shivanga	-	-	-	46	-	10	2	1	-	46	
6. Madhugiri	-	-	1	-	-	-	3	-	1	1	-	-	3	Sold on 12/8/27
7. Shimoga	-	-	1	-	-	-	40	-	8	2	-	-	40	
8. Chikmagalur	-	-	1	-	-	-	76	-	11	2	-	-	76	
9. Chitaldrug	-	-	Big Bull	-	-	-	27	-	5	2	-	-	27	Transferred & to Jagalur on 24/11/27
10. "	-	-	Small Bull	-	-	-	159	-	14	3	-	-	159	
11. Jagalur	-	-	1	-	-	-	67	-	7	2	-	-	67	
12. Hassan	-	-	New Bull	-	-	-	77	-	14	4	-	22	77	
13. "	-	-	Old Bull	-	-	-	85	-	13	3	-	26	85	
14. Kolar	-	-	Buff. Bull	-	-	-	47	-	3	2	-	-	47	
15. Tumkur	-	-	"	-	-	-	110	-	16	3	3	-	110	
16. Hassan	-	-	"	-	-	-	95	-	30	3	-	-	95	

Major.
Superintendent

Introduction.

The most important work of the Civil Veterinary Department during the year was its attempt to control our most serious cattle disease-Rinderpest. The establishment of our own Serum Institute has made possible the institution of a regular campaign of Serum Simultaneous Inoculation against this disease. If we can add to this some effective control over the movement of cattle it should enable the Department to reduce our losses from this disease to a minimum.

A total of 72,535 animals were inoculated against rinderpest with the Serum Simultaneous Method during the year. Out of this total there were only 92 deaths which could be considered as the results of inoculation was due to lack of protection. This works out at a little more than one tenth of one percent of the total which is so small a number as to be negligible. The information that serum simultaneous inoculation done in previous years protected animals during the attack of the year under review gives us a certain feeling of security. However unpublished information which has recently come to me seems to indicate that with young animals under two or three years of age the effect may not be so permanent as with older animals. I propose having this matter thoroughly investigated by the Department.

The effect of uncontrolled movement of cattle from infected areas on the outbreak of disease is clearly brought out in the report and it seems fairly obvious that even were we able suddenly to strengthen our staff very greatly we should continue to have serious troubles on this account. The recent appointment by Government of a representative committee to go into questions connected with the movement of cattle which are infected or have been exposed to infection should lead to some definite action to check this means of disease spread.

As to the question of strengthening the staff of the Department this must I think depend largely upon the training of our own men. Unfortunately for two or three years no men were sent for training and we are now suffering from this. We have at present 27 men under training so that the present shortage though unfortunate will be of temporary duration.

The questions of pay and prospects raised by the Superintendent are not ones, I feel, I can discuss here. From my own standpoint it is unfortunate that of the two reorganisations which have taken place in this Department during the past ten years one took place just prior to my taking over charge of the Department and the other during my recent long leave. I therefore had no opportunity of expressing my opinion on the matter on either occasion.

As to the other work carried out by the Department it may be stated that if our Serum Institute is enlarged and strengthened we should be able to manufacture most of the sera and vaccines required for the control of our more serious cattle diseases, and that would undoubtedly greatly facilitate disease control work in the State.

The work of Veterinary Inspectors in the Hospitals and Veterinary Dispensaries and on tour has shown an increase over the previous year and with an increase of the Assistant Superintendents to one for every two districts which came into effect at the beginning of the present year we should have an increase of efficiency all around.

I wish to express my appreciation of the efficient work Major Simpson and his staff.

Director of Agriculture

C.V. 64—28—2

Issue & Submit.

Proceedings of the Govt. of H.H.
the Maharaja of Mysore.

Read -

Letter No.Per. 45-28, dated the 20th November 1928 from the Director of Agriculture in Mysore, submitting the report on the working of the Civil Veterinary Department during the year 1927-28, together with an introductory note by himself.

(Printed as annexure).

Order No.D. 6425-83.8 22/12

Dated, Bangalore, 22/12/1928.

R e c o r d e d.

2. The C.V.D. was reorganised during the year. A certain amount of decentralisation was effected by increasing the number of Divisional Officers from two to four so as to relieve the Supdt. of some of his routine duties, and also ensure closer supervision of District work. Another very important measure was the establishment of the Serum Institute on a satisfactory basis. The Department seems to be gaining ground in the confidence of the people and securing an increasing measure of co-operation.

3. The seasonal conditions were on the whole favourable, though scarcity of fodder was experienced in some parts owing to lateness of the N.E. Monsoon.

p.t.o.

Contagious diseases

4. During the year, 1186 fresh cases of rinderpest, 2036 of anthrax, 463 of haemorrhagic septicaemia, 1505 of black quarter and 2397 of other diseases were registered and the situation taxed the resources of the Department severely. The experience this year points to the imperative necessity for exercising effective control over the movements of cattle in infected villages and also to and from cattle fairs. It is also necessary to take measures for securing prompt and correct information of the occurrence of infectious diseases in villages. These questions are being examined by a Special Committee and Government hope a decision will be reached at an early date.

5. The prevalence of rinderpest was unfortunately widespread during the year, mainly on account of the cattle dealers from the Madras Presidency purchasing at cheap prices large numbers of cattle from infected localities and marching them through the State en-route to the British Territory. As the Veterinary staff was fully occupied in combating the spread of rinderpest, ~~with this disease~~, it was not possible for them to devote ~~appreciable~~ as much attention as could be desired to cases of anthrax and haemorrhagic septicaemia. (Transfer this & end of para.) It is however satisfactory that the inoculation campaign was pursued with zeal and is gaining in popularity. It is reported that the spread of rinderpest was effectively checked by

It was however a redeeming feature of the situation that the campaign of inoculation was pushed with vigour, and was facilitated by an increasing realisation of its usefulness on the part of the people.

172535 cattle having been so inoculated /

means of S.S. inoculation, only 2 of ~~the S.S. inoculated cattle~~ them being reported to have shown symptoms of the disease and that only in a very mild form. Active immunisation is now universally adopted in the State and the results have been very satisfactory.

Serum Institute.

6. The Serum Institute was developed and placed on a satisfactory basis. The expansion of the inoculation work this year was largely due to the successful production of serum in the Institute. As the Director's review of the work of the Institute has already been recorded, it is unnecessary to dwell on it at greater length here.

Hospitals and Dispensaries.

7. Six dispensaries were opened during the year at Goribidnur, Gundlupet Chennarayapatna, Nelamangala, Hoskote, and Sorab. The total number of Veterinary Institutions in the State stood at 45 at the end of the year. Orders have since been passed for the immediate opening of Veterinary Dispensaries at Devanahalli and Heggadadevankote. The generous offer of a building for the purpose at the ~~latter~~ former place by Mr. Yele Krishnappa has been thankfully accepted by Government.

It has been brought to notice that the equipment of veterinary dispensaries requires to be improved.

Cattle Fairs.

8. The Officers of the Department attended 75 out of 95 cattle fairs, and temporary dispensaries were opened at

fairs wherever accommodation was available. The Director of Agriculture is requested to examine the present position in regard to the regulations of cattle fairs from the point of sanitation and safeguards against spread of cattle diseases, and submit proposals to Government regarding the measures necessary for minimising the dangers incidental to a large congregation of cattle from all parts of the country.

Government notice with regret that there is a serious shortage in the State's supply of breeding bulls, and think that the matter requires early and careful consideration. They have referred in their review of the Administration Report of the Amrit Mahal Department to the desirability of that Department concentrating its resources as far as possible on the production of breeding stock for improving the cattle of the raiyats; but this can only meet the situation partially, and it will still be necessary to take steps to provide a large number of breeding bulls from other sources. Govt. trust that the recently constituted Special Committee presided over by the Director of Agriculture will investigate this question thoroughly and furnish its recommendations.

Government are glad to note that the Department has worked satisfactorily

30

during the year under review.

6/12/28

5.12.28

Secretary to Govt.,
Development Deptts.

To

The Director of Agriculture in Mysor

The Revenue Commissioner in Mysore.

The Heads of Departments.

The Deputy Commissioners of Dists.

The Presidents of Dist. Bx Boards.

App. F. VI G 10.

Government of His Highness the Maharaja of Mysore.

GENERAL AND REVENUE DEPARTMENTS

G. O. No. D 6425-83/CV64-28-2 DATED 22nd Dec^r 28

Report on the working of the Civil Vet^y Deptt during the year 1927-28 - Revised
Passes orders reviewing the —

May this be

i. printed? yes

ii. treated as a standing order? No

iii. published in the Gazette English Part? yes

iv. translated? yes

v. placed at the disposal of the press? yes

vi. published in the Gazette Kannada Part? yes

5.1.29

CCV

51

THE ANNUAL REPORT OF THE MYSORE CIVIL VETERINARY DEPARTMENT FOR THE YEAR 1927-28.

WITH THE GOVERNMENT REVIEW THEREON.

Government of his Highness the Maharaja of Mysore.

GENERAL AND REVENUE DEPARTMENTS.

G. O. No. D. 6425-83—C. V. 64-28-2, dated 22nd December 1928.

Report on the working of the Civil Veterinary Department.

Reviews the —— for the year 1927-28.

EAD—

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(Printed as annexure.)

ORDER NO. D. 6425-83—C. V. 64-28-2, DATED 22ND DECEMBER 1928.

Recorded.

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3. The seasonal conditions were on the whole favourable, though scarcity of fodder was experienced in some parts owing to lateness of the N.-E. Monsoon.

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Serial No.

256

Submitting for para 2 above.

Kindly see minute for P.O. No 1) 4976-83.

C.V. 110-30-83 & 14/436-

1) approving of the plans & estimate for Rs 17,400 as prepared by the Chief Engineer for the construction of the Valaichenai Hospital buildings at Eleyoor by the Nanjamma Balasubramaniam Chattram Committee,

2) sanctioning the grant of a loan of Rs 6000/- to the Chattram Committee from the balance at the credit of the Chattram savings fund for the acquisition of a private land and for the completion of the buildings, subject to certain conditions,

& 3) directing that the rent of the buildings be raised from Rs 70/- P.M. to Rs 95- P.M.

257 The Chief Engineer has been requested to submit, for the orders of Govt, a revised plan & estimate.

by 17/2 Submitted for perusal.

258 The loan required to complete the Valaichenai Hospital buildings in the Chattram compound has been sanctioned No further action can be taken in this section

by (A Secy) 18-2

259 Yes- Other matters have been attended to in the respective sections- by 18/2

by 18-2.

654

NOTE.—Contn. Sheet.

WJ 01691—GPB—80,000—18-7-85

Administrative Section has been taken on 1893

No. D. 6425-83—C. V. 64-28-2, DATED 22ND DECEMBER 1928.

7. *Hospitals and Dispensaries.*—Six Dispensaries were opened during the year at Goribidnur, Gundlupet, Channarayapatna, Nelamangala, Hoskote and Sorab. The total number of Veterinary Institutions in the State stood at 45 at the end of the year. Orders have since been passed for the immediate opening of Veterinary Dispensaries at Devanhalli and Heggaddevankote. The generous offer of a building for the purpose at the former place by Mr. Yele Krishnappa has been thankfully accepted by Government.

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N. RAMA RAO,
Secretary to Government,
Development Departments.

To—The Director of Agriculture in Mysore.
The Revenue Commissioner in Mysore.
The Heads of Departments.
The Deputy Commissioners of Districts.
The Presidents of District Boards.

FXD.—P. S. R. N,
WD 1841—GPB—725—4-1-29.

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I wish to express my appreciation of the efficient work of Major Simpson and his staff.

L. C. COLEMAN.

THE ANNUAL REPORT OF THE MYSORE CIVIL VETERINARY DEPARTMENT FOR THE YEAR 1927-28.

Administrative Staff.

Major R. W. Simpson, Superintendent, was in charge for the whole period. Mr. K. Krishnaiengar, Assistant Superintendent, continued in charge of the Eastern Division, with his headquarters at Bangalore. Mr. K. N. Sreenivasan, Assistant Superintendent, also continued in charge of the Western Division for ten months, with his headquarters at Shimoga, when he availed himself of two months' privilege leave, and Mr. B. V. Venkatachar, Veterinary Officer, Bangalore, was appointed to act for him.

Seasonal Conditions.

The seasonal conditions were on the whole fair. There was a certain amount of scarcity of fodder and water in parts of the Madhugiri, Sira, and Tiptur Taluks in the Tumkur District; and in parts of Gundlupet, Yedathore, Malvalli, and Nagamangala Taluks in the Mysore District scarcity of fodder for two months owing to a late North-East monsoon was also keenly felt in the Chitaldrug District.

Contagious Diseases.

The year opened with 88 outbreaks of rinderpest, 33 of anthrax, 15 of haemorrhagic septicaemia, 477 of blackquarter, and 180 of other contagious diseases requiring attention.

During the year 1,186 fresh outbreaks of rinderpest, 2,038 of anthrax, 463 of haemorrhagic septicaemia, 1,505 of blackquarter, and 2,397 of other contagious diseases were registered.

The staff were only able to personally attend to 818 outbreaks of rinderpest, 425 of anthrax, 118 of haemorrhagic septicaemia, 1,503 of blackquarter, and 833 of other contagious diseases. In 1,613 outbreaks of anthrax, 342 of haemorrhagic septicaemia, 1,485 of other contagious diseases, instructions were sent to the Patels of villages concerned, instructing them of the precautions they should take and that they should report progress of disease.

Rinderpest.—At the beginning of the year under reference rinderpest was prevailing only in most of the Taluks in the Mysore District, in three Taluks in each of the Hassan and Shimoga Districts, and in two Taluks in the Kadur District, but during the course of the year it spread to every Taluk in the State, principally through cattle dealers from the Madras Presidency purchasing large numbers of cattle cheaply in infected areas and marching them through the State into British Territory. Although some of the cattle dealers were warned of the presence of rinderpest in the area in which they were purchasing cattle, they nevertheless continued to do so. Several outbreaks of rinderpest, 150 miles away, were subsequently traced to the infection carried by the cattle purchased by these men. Conditions were aggravated with the increased movement of cattle to and from Cattle Fairs. In areas where there is a Veterinary Inspector to each Taluk, the disease was promptly dealt with, and so kept in hand, but in areas where a Veterinary Inspector has more than one Taluk to attend to, the disease got out of hand, and this accounts for the unprecedented number of villages infected in the State. This bears out my repeated statements that it would be more economical in the long run to have a Veterinary Inspector to each Taluk, with a reserve of men to assist him in cases of emergency. It is of interest to note that though rinderpest again appeared during the year in several villages, where S. S. inoculation had been undertaken in 1925, only two of the S. S. inoculated cattle showed symptoms of the disease, and then only in a very mild form.

During the year, 72,535 animals were protected against rinderpest by active immunisation and 100 by passive immunisation. The number protected would have been larger had the supply of serum been equal to the demand. Active immunisation against rinderpest has been universally adopted in the State, and has given most satisfactory results. The people have begun to realise its efficacy, and those who refuse to produce their cattle for inoculation in the first instance, soon come to their senses, when they find their cattle dying, while the inoculated remain healthy.

The success attending this inoculation has undoubtedly brought the work of the Department into prominence, and has greatly helped to gain the confidence of the Agricultural population. It has been found more satisfactory to give a smaller dose of serum and have a slight thermal reaction, than to give a large block-out dose followed with no reaction, especially in cases where controls cannot be had, and the people are often indifferent as to whether the second injection is given or not. See Appendix VIII for the form used for collecting statistics showing the results of this method of inoculation.

Working in already infected villages, it must often happen, especially as the temperatures of all the cattle cannot be taken before inoculation on a large scale by one man and his assistant,—that animals already infected with the disease, get inoculated; so animals showing a reaction before 96 hours after inoculation, are considered as infected at the time of inoculation. From statistics collected, the following are the results of S. S. inoculation:—

Attacks and deaths from rinderpest in Villages where S. S. Inoculation has been undertaken		Number Inoculated	Result among the inoculated							
Attacks	Deaths		Reactors within 4 days of inoculation	Deaths	Reactors between 4th and 7th day	Deaths	Reactors between 7th and 14th day of inoculation	Deaths	Attacks after the 14th day	Deaths
1	2	3	4	5	6	7	8	9	10	11
15,449	6,822	72,535	459	73	2,357	40	1,254	29	140	23

The figures given in columns 6 and 8 include animals that have shown either slight or severe reactions. If the deaths, among the animals that reached within four days of inoculation, are not taken into consideration, the deaths among the inoculated work out to less than one per cent. When animals develop the disease after the 14th day after the first inoculation, it shows that inoculation has been a failure, and this is probably due to the virus being defective. Such cases are shewn as attacks after inoculation.

Total number of deaths from rinderpest, according to Cattle Mortality Returns received from Patels, is 14,891 against 12,321 of the previous year, but this cannot be taken as a correct figure, as 50 per cent of the Patels do not submit these returns regularly, and several of the Patels who do so, do not record all the deaths that occur. The number recorded could, without exaggeration, be doubled.

Anthrax.—Very little attention could be paid to this disease, other than sending written instructions to Patels of villages where there had been deaths, as the staff were fully occupied dealing with rinderpest.

Until the staff is considerably increased, it will not be possible to carry out preventive inoculation against anthrax on a large scale, and so reduce the high mortality from this source.

The Australian Spore Vaccine prepared by the Biological Institute of Australia, Sydney, continues to be used, and the results obtained among cattle so inoculated are very encouraging. There have been no further deaths from Anthrax on the Rayankere Dairy Farm, since the cattle were protected in February 1927, where, previous to this vaccination, deaths occurred at frequent intervals. Occasionally an animal develops anthrax from 24 to 96 hours after vaccination, but every such case has been promptly treated with an intravenous injection of the Muktesar anti-anthrax serum, and cured.

The mortality, after vaccination among sheep and goats, varies from 5 to 15 per cent, but as this is slight when compared with the high mortality from the disease itself in infected localities, the people think nothing of it, and are only too pleased to feel the remainder of their flocks are safe.

Experiments with the anti-spore vaccine were tried on horses and elephants. On horses it caused extensive œdematous swelling of the fore limb on the side inoculated, and so it has not been tried since on horses.

The Aggressin prepared by the Jensen Salsbery Laboratories, Kansas City, gave better results, and all the horses of the Mysore Military were during the year protected with it.

The anti-spore vaccine gave better results with Elephants. Seven were protected with it, and for 10 months there have been no further deaths among the elephants in the Shimoga District where previously deaths have occurred in the previous two years. The safe dose for a full grown elephant is 1·5 c.c.

The Aggressin prepared by the Jensen Salsbery Laboratories is to be tried on sheep and goats during the coming year.

Blackquarter.—Protective inoculation against blackquarter is becoming more and more popular every year in the State. Where formerly there was opposition to it, complaints are now made by the people if the staff do not promptly visit the villages to undertake inoculation. In areas subject to this disease, the staff now carry in their equipment bottles of anti-blackquarter serum in order to give intra-venous injections without delay to animals found suffering from the disease. This treatment has been attended with great success, and has done much in enabling the staff to gain the confidence of the people.

For protective inoculation the Aggressin only is used. No harm is done by using the Aggressin where the disease exists if serum is available for intravenous injections in case the inoculated animals develop the disease.

The high mortality from anthrax and blackquarter is a considerable loss not only to the cattle owners, but also to the State, as it is only the better cared for and more valuable animals that appear to contract these diseases. This is the class of animal that is purchased by people outside Mysore, and so every animal thus lost, means so much less money coming into the State.

Unfortunately the Districts where these diseases occur periodically and cause such heavy mortality are poorly staffed, and in consequence protective inoculation can only be undertaken to a limited extent.

It will thus be seen that it would be really economical in the long run if the State spent more money in protecting more of these valuable cattle, which are a considerable source of income to the State. This can be done by increasing the staff considerably, by having at least a Veterinary Inspector in each Taluk with an ample supply of vaccine always in stock, so that all the young stock can be protected.

Haemorrhagic Septicaemia.—Very little attention could be paid to this disease. Of the 463 outbreaks registered during the year, only a hundred and eighteen received attention, owing to the area allotted to each Veterinary Inspector being too extensive to enable him to cope with the numerous outbreaks occurring in his area. Besides, sufficient funds not being provided, it was not possible to lay in sufficient vaccine to meet the large and continual demand.

Other contagious diseases.—Foot and mouth diseases spread to all the Districts in the State and were responsible for the high mortality in some of the Malnad Taluks. Sheep-pox as usual accounted for the heavy mortality among sheep in the Eastern Districts. Unfortunately, owing to the staff having rinderpest

and other outbreaks to deal with, very little attention could be paid to this disease. In one village in the Bangalore Taluk, cow-pox lymph was tried with satisfactory results. Parasitic diseases seem to be getting steadily worse, and are largely responsible for retarding the development of the young stock, and for the poor condition of the older stock. More attention should be given to these diseases, but with the present staff this is impossible.

Personnel.

The staff have, as a whole, done another year of splendid work, notwithstanding the fact that a number of them have had their constitutions undermined with Malaria, working in the unhealthy tracts of the Malnad.

Though Government were pleased to reorganise the Department by increasing the number of Divisional Officers by two, and by increasing the number of Inspectors in the first grade by four, resignations continue. This shows that the reorganization is apparently not sufficiently encouraging to temptmen to remain. There is also great discontent among the second and third grade Inspectors, as they have been badly hit by the reorganization. They now get yearly increments of only Rs. 4 as against Rs. 5, and by Government not giving these men an advanced increment this year, several of them will, according to the Mysore Service Regulations, not draw the pay they were entitled to under the old scale, before July 1930.

There is also much discontent among the lower subordinates, owing to their pay not being improved. At present they are the poorest paid men in the service and with no prospects. This results in their leaving just as they have learnt enough to be useful assistants to the Veterinary Inspectors. This unsatisfactory state of affairs greatly retards the smooth working of the Department. The people, who in consequence suffer, are the raiyats, as they do not get the same attention paid to their live-stock as they would if there was not this continual introduction of untrained and inexperienced men to assist the Inspectors, and to treat animals in the absence of the Inspectors from headquarters.

Five Veterinary Graduates from the Bengal Veterinary College, seven from the Madras Veterinary College and two from the Bombay Veterinary College, were entertained. Six Veterinary Inspectors resigned during the year of whom three had completed two years' service. Among these one was a Mysorean.

Six candidates were selected as Mysore stipendiary students to undergo a course of study in the Punjab Veterinary College, Lahore. This made in all 27 students in the Punjab Veterinary College and one in the Bombay College. The student in the Bombay College qualified in April.

The two Veterinary Inspectors deputed for a three years' training, returned in January, and have done some very useful work since.

Hospitals and Dispensaries.

Six dispensaries were opened during the year at Goribidnur, Gundlupet, Channarayapatna, Nelamangala, Hoskote and Sorab. This makes a total of 45 institutions in the State, but more are badly needed, and especially in those places where there is only one institution for two or more Taluks. These institutions serve a very useful purpose, as they are not only places where the raiyat gets his animals treated, but the meeting place of the raiyats when they visit the Taluk headquarters on business, and especially on the weekly bazaar days. Thus, if the Inspector makes the raiyats welcome and shows an interest in village matters, their cattle, etc., he invariably receives an invitation to visit their villages. Having thus gained their confidence, he gets immediate information of outbreaks of disease, and meets with no opposition in pushing preventive inoculation and the castration of scrub bulls.

Several of the older institutions still remain very poorly equipped, and such instruments that they do possess, are becoming useless through wear. Liberal grants are required for the re-equipment of these institutions. This state of affairs handicaps work considerably, disheartens the staff, and gives rise to complaints from the people.

Many of the instititutions are still located in very unsuitable buildings.

Most of the Local Bodies concerned have agreed to bear their quota for the erection of suitable buildings, but unfortunately Government have not seen their way to provide additional funds as the Provincial quota.

Mr. Yele Krishnappa of Devanhalli has constructed a substantial and imposing building at Devanhalli, and orders of Government are awaited for the opening of an institution there.

With the exception of the buildings at Tiptur and Channarayapatna, which two citizens so generously are erecting, the other citizens, who promised to erect buildings in different places, have not done so.

During the year Government have generously come forward to bear half the rent of the buildings rented for Dispensaries, where the rent had hitherto been borne entirely by the local bodies concerned.

Ninety-six thousand two hundred and four fresh cases were treated in Veterinary Institutions against 67,137 of the previous year, and 5,807 castrations and 6,145 operations were performed against 3,454 and 5,332 and respectively of the previous year. Yet these institutions are not being made as much use of by the people asthey should be. The reason is that those who have to bring their animals from a distance, can never be sure of finding the Veterinary Inspector at his institution, as he is more often away than at headquarters, dealing with the numerous outbreaks in the extensive area allotted to him.

If the assistants to the Inspectors were capable and experienced men they would, to a certain extent, be able to attend to the Hospital work during the Inspector's enforced absence, but as already stated, owing to frequent resignations, inexperienced and untrained men have to be employed.

Work done on tour.

The Veterinary Inspectors, again this year, have had very little time for systematic touring owing to the large number of outbreaks, but they nevertheless took full advantage of their stay while in villages attending to outbreaks, to do as much as possible for the raiyats by operating on and treating such animals that required attention.

The staff, while on tour, castrated 31,008 animals against 24,658 of the previous year; treated 25,811 against 17,190 of the previous year; and performed 521 operations.

Cattle Fairs.

Of 95 cattle Fairs held in the State, 75 were attended by the staff, and in those places where accommodation was provided, temporary dispensaries were opened. Several of the local bodies, responsible for the management of these fairs, did all they could to assist the staff in their work, and to minimise the breaking out of disease among the Cattle.

Rules and regulations are very necessary for the guidance of those responsible for the management of these Cattle Fairs, especially for private individuals who organise and run a few of them and whose one idea is to get some income for a Temple or for themselves, but have little regard for the spread of disease.

Breeding bulls.

There were twelve breeding bulls, and three buffalo bulls stationed in Veterinary Institutions.

The two bulls at Bangalore died during the year, and the bull at Madhugiri was sold.

Nine hundred and fifty-nine cows and 252 buffalo cows were served during the year.

At present there is a serious shortage of good breeding bulls in the State, owing to all the promising bull calves being purchased and taken out of the State. It is no exaggeration to say that the shortage of good breeding bulls will seriously affect the economical condition of the State in the near future. In a State like

Mysore with an extensive export trade in cattle, bringing in nothing less than half a crore of rupees yearly, it is a suicidal policy to neglect this important industry. Every endeavour should be made without delay to improve the breed by the free distribution of at least 5,000 young breeding bulls in villages that are prepared to maintain them as breeding bulls.

In order to retain these bulls, it will be necessary for Government to have a lien on them and so prevent them being sold and taken out of the State.

Conferences

Of the 44 District and Taluk Conferences held during the year, 38 were attended by the staff. Reports on the work done by the Department in districts and taluks, were read at these conferences. For the first time in the State, a Poultry Show was organised in connection with the Kadur Conference.

Jatka ponies.

With the advent of motor buses, Jatka conveyances have practically disappeared. A few still ply for hire between the Holalkere Railway Station and Holakere Town; French Rocks Railway Station and Town; and Chintamani and Kolar Towns. The ponies were examined twice during the year, and most of them were found totally unfit for use, but unfortunately the officers of the Department cannot take action against the offending Drivers, and the Police do not seem to think it their duty to do so. As things stand, these half-yearly inspections serve no useful purpose.

Examination of Bacteriological and Pathological Specimens.

The Department not having its own laboratory, specimens had to be sent to the Public Health Institute. Five hundred and fifty-five specimens were examined with the following results:—

No.	Items	Positive	Negative	Total
		Rs.	Rs.	Rs.
1	Piroplasmosis	64	353	417
2	Black-quarter	5	13	18
3	Anthrax	23	48	71
4	Hæmorrhagic Septicæmia	2	11	13
5	Jhone's disease	...	1	1
6	Glanders	1	4	5
7	Malignant Odema	5	..	5
8	Fibro Sarcoma Tumeours	2	...	2
9	Tuberculosis	...	1	1
10	Gonococci	..	2	2
11	Trypanosomiasis	2	3	5
12	Pathological Specimens	...	7	7
13	Urine	...	8	8
	Total	104	451	555

R. W. SIMPSON, Major,
Superintendent.

APPENDIX I.

Statement showing the work done in the Civil Veterinary Department during the year 1927-28.

Sl. No.	Particulars	Number
1	Number of fresh cases admitted to the institution	96,204
2	Total daily attendance for the year	2,06,359
3	Number of castrations performed in the institutions	5,807
4	Number of other operations performed in the institution	6,145
5	Number of cases treated on tour	25,811
6	Number of castrations performed on tour	31,008
7	Number of other operations performed on tour	521
8	Number of outbreaks of rinderpest pending on 1st July 1928	88
9	Number of outbreaks of rinderpest registered during 1927-28	1,186
10	Number of outbreaks of rinderpest attended to during 1927-28	818
11	Number of outbreaks of rinderpest where inoculation was totally refused ..	36
12	Number of outbreaks of Anthrax pending on 1st July 1927	33
13	Do do registered during 1927-28	2,038
14	Do do attended during 1927-28 {Personally ... / By written instruction	425 / 1,613
15	Number of outbreaks of H. S. pending on 1st July 1927	15
16	Do do registered during 1927-28	463
17	Do do attended to during 1927-28 {Personally ... / By written instruction	118 / 342
18	Number of outbreaks of black-quarter pending on 1st July 1927 ...	477
19	Do do registered during 1927-28 ...	1,505
20	Do do attended to during 1927-28 ..	1,503
21	Number of outbreaks of all other contagious diseases pending on 1st July 1927...	180
22	Do do registered during the year 1927-28 ...	2,397
23	Do do attended to during 1927-28 {Personally ... / By written instruction.	833 / 1,485
24	Total number of outbreaks that were detected {Personally on tour ... / By checking C. M. R. in Taluk Offices ...	346 / 3,357
25	Total number of outbreaks that were reported through C. V. D. 10 B .. / C. V. D. 10 C ...	2,033 / 1,653
26	Number of inoculations performed against rinderpest S. S. Method ... / S. A. Method ...	72,535 / 100
27	Number of inoculations performed against anthrax	6,697
28	Do do blackquarter	24,583
29	Do do Haem. Sept.	2,117
30	Do Vaccination against sheep-pox	178
31	Number of cattle fairs held	95
32	Do do attended by the Veterinary Inspectors	75
33	Do Taluk Conferences held	44
34	Do do attended	38

APPENDIX II.

Statement showing the number of outbreaks of Epidemic Cattle Diseases attended to in the State during the year 1927-28.

Area	Rinderpest	Anthrax	Haem. Sept.	Black-quarter	Other contagious diseases	Total for 1927-28	Total for 1926-27
Bangalore ...	37	46	4	30	46	163	147
Anekal ..	11	44	4	25	36	120	120
Dodballapur ..	9	148	14	115	133	419	522
Hoskote ...	8	37	2	17	23	87	..
Channapatna ...	2	55	12	59	49	177	164
Kankanhalli ...	15	31	8	45	40	139	105
Magadi ..	8	46	5	26	43	128	116
Nelamangala ...	13	16	...	...	9	38	..
Mysore ...	53	122	23	76	73	347	399
Chamrajnagar ...	83	59	10	9	15	176	258
Gundlupet ...	13	24	4	1	2	44	...
Hunsur ...	66	47	10	78	94	295	295
Yedatore ...	31	19	13	16	112	191	127
Nagamangala ...	32	43	16	117	103	311	328
Malvalli ...	16	98	23	94	68	299	319
Tumkur ..	21	123	16	98	41	299	68
Madhugiri ..	19	35	7	35	63	159	445
Sira ..	4	18	5	14	37	78	65
Tiptur ...	10	28	7	43	84	172	328
Kolar ...	23	228	19	71	70	411	509
Chikballapur ...	11	37	11	84	51	194	205
Chintamani ...	4	98	17	57	34	210	266
Goribidnur ...	11	8	2	30	15	66	...
Kolar Gold Fields ...	...	7	1	7	2	17	7
Shimoga ...	3	74	3	9	72	161	231
Sagar ...	8	77	21	14	49	169	301
Sorab ...	3	...	...	...	...	2	...
Shikarpur ...	2	54	7	5	27	95	115
Channagiri ...	28	117	21	38	35	239	200
Tirthahalli ..	10	14	10	2	20	56	69
Chitaldrug ...	10	65	7	20	65	167	195
Davangere ...	23	14	2	22	21	82	111
Hosdurga ...	20	87	2	17	76	202	239
Challakere ..	9	17	..	17	86	129	108
Jagalur ..	20	17	3	20	29	89	49
Hassan ...	8	14	21	55	88	186	314
Saklespur ...	53	16	57	22	109	257	451
Arkalgud ...	16	5	5	20	47	93	160
Hole-Narsipur ...	13	2	8	27	52	102	204
Chennarayapatna ...	16	2	5	27	53	103	..
Arsikere ...	5	10	10	23	39	87	114
Chikmagalur ...	37	23	12	9	123	204	324
Tarikere ...	31	12	10	9	44	106	110
Mudigere ...	...	1	22	...	30	53	69
Koppa ...	4	...	1	...	10	15	...
Total for the year 1927-28	818	2,038	460	1,503	2,318	7,137	...
Total for the year 1926-27	1,100	2,211	504	2,405	2,437	...	8,657

APPENDIX III.

Statement showing the work done in each Veterinary Institution in the State, for the year 1927-28.

Area	Fresh cases admitted	Total attended	Castrations	Operations
Bangalore	5,765	13,328	153	748
Anekal	2,404	4,887	226	384
Dodballapur	2,165	3,704	164	186
Hoskote	450	1,104	41	32
Channapatna	2,322	6,143	213	193
Kankanhalli	1,008	3,625	57	73
Magadi	2,427	5,959	211	57
Nelamangala	366	1,011	25	40
Mysore	3,423	8,832	75	343
Chamrajnagar..	2,564	4,445	83	113
Gundlupet	2,047	2,451	3	14
Hunsur	2,031	4,978	145	59
Yedatore	1,105	2,273	104	55
Nagamangala	1,542	2,811	84	145
Malvalli	1,637	3,482	100	156
Tumkur	5,023	11,971	605	396
Madhugiri	2,069	3,754	338	265
Sira	2,589	5,223	157	160
Tiptur	5,008	7,645	221	102
Kolar	1,125	2,401	99	101
Chikballapur	1,933	4,239	101	222
Chintamani	2,473	4,812	104	68
Goribidnur	864	2,500	53	67
Kolar Gold Fields	1,910	5,516	94	128
Shimoga	3,645	7,573	104	223
Sagar	1,248	3,055	16	72
Shikarpur	3,322	5,951	75	164
Channagiri	3,036	7,134	57	113
Sorab	81	192	2	16
Tirthahalli	1,701	3,111	30	50
Chitaldrug	2,725	4,790	174	162
Davangere	1,936	5,439	122	71
Hosdurga	1,705	4,380	133	87
Challakere	2,327	3,624	247	42
Jagalur	814	2,219	48	29
Hassan	3,309	5,999	397	151
Saklespur	1,489	3,154	19	47
Arkalgud	1,603	3,234	103	93
Hole-Narsipur	2,680	5,197	267	149
Chennarayapatna	1,733	3,132	189	159
Arsikere	2,284	6,301	191	124
Chikmaglur	2,729	6,381	95	179
Tarikere	1,917	3,926	40	55
Mudgere	1,489	3,992	31	51
Koppa	181	473	10	1
Total ...	96,204	2,06,359	5,807	6,145
Total for 1926-27 ...	67,137	1,53,265	3,454	5,311

APPENDIX IV.

Statement showing the number of Inoculations done against Epidemic Diseases in the State during the year 1927-28.

Area	Rinderpest		Black-quarter	Anthrax	Haem. Sept.	Total 1927-28	Total 1926-27
	S. S.	S. A.					
Bangalore ...	3,048	...	...	590		3,638	2,484
Anekal ...	3,099	...	1,032	...	...	4,131	2,117
Dodballapur ...	1,360	...	1,273	37	...	2,670	4,211
Hoskote ..	855	...	725	...	...	1,580	...
Channapatna ...	112	...	2,404	325	...	2,841	4,527
Kankanhalli ...	2,807	...	1,457	335	..	4,599	2,393
Magadi ...	1,311	...	1,572	...	...	2,883	1,034
Nelamangala ...	662	...	...	...	...	662	...
Mysore ...	7,351	...	237	65	...	7,653	8,923
Chamrajnagar ...	5,178	...	892	...	...	6,070	6,966
Gundlupet ...	3,083	...	...	...	...	3,083	...
Hunsur ...	5,351	...	...	...	...	5,351	5,249
Yedatore ...	2,602	...	...	...	...	2,602	1,386
Nagamangala ...	5,331	...	1,194	103	...	7,018	4,904
Malvalli ...	862	..	1,910	...	...	2,722	2,998
Tumkur ...	2,481	...	7,868	1,114	...	5,463	3,459
Madhugiri ...	1,412	...	709	760	...	2,881	8,012
Sira ...	539	75	120	...	...	734	948
Tiptur ...	729	...	935	237	...	1,951	2,224
Kolar ...	1,807	...	448	1,327	...	3,582	3,029
Chikballapur ...	392	...	1,795	...	...	2,387	2,588
Chintamani ...	...	...	1,176	703	...	1,879	4,217
Goribidnur ...	659	...	146	...	...	805	...
Kolar Gold Fields ...	...	...	280	...	...	280	281
Shimoga ...	78	...	91	...	...	169	263
Sagar ...	412	...	...	...	...	412	1,185
Sorab ...	...	...	...	...	...	...	...
Shikarpur ...	659	...	132	164	205	1,160	617
Channagiri ...	1,910	...	123	...	...	2,033	1,533
Tirthahalli ...	727	...	...	...	70	797	1,351
Chitaldrug ...	1,055	...	504	...	...	1,599	2,635
Davangere ...	815	...	381	...	58	1,254	1,319
Hosdurga ...	1,623	...	216	...	...	1,839	1,815
Jagalur ...	1,180	...	135	350	...	1,665	951
Challakere ...	821	...	25	...	...	846	3,184
Hassan ...	1,227	25	409	154	...	1,815	5,427
Saklespur ...	1,398	...	534	152	1,255	3,339	3,899
Arkalgud ...	1,398	...	603	134	...	2,135	4,292
Hole-Narsipur ...	1,388	...	455	...	...	1,843	4,231
Channarayapatna ...	1,895	...	437	...	...	2,332	...
Arsikere ...	368	...	345	...	...	713	2,378
Chikmagalur ...	1,924	...	...	...	...	1,924	4,238
Tarikere ...	1,854	..	20	7	...	1,891	964
Mudgere ...	...	...	...	...	520	529	532
Koppa ...	62	...	...	...	...	62	...
Total for 1927-28 ...	72,535	100	24,583	6,697	2,117	1,06,032	...
Total for 1926-27...	24,498	24,555	50,521	5,952	2,238	...	1,07,764

APPENDIX V.—Statement showing the percentage of Cattle Mortality Returns received from the Patels during the year 1927-28.

Serial No.	Name of District	Percentage of Cattle Mortality Returns received from the Patels	Remarks
1	Mysore	67	
2	Bangalore	60	
3	Tumkur	75	
4	Kolar	76·5	
5	Shimoga	72·5	Average percentage of returns received for the whole State is 75
6	Kadur	80	
7	Hassan	61	
8	Chitaldrug	72	

APPENDIX VI.—Statement showing the Cattle Mortality in the State from Contagious Diseases during the year 1927-28.

District	Rinderpest	Hæmorrhagic Septicæmia	Anthrax	Blackquarter	Foot and Mouth	Surra	Red-water	Parasitic diarrhœa	Other contagious diseases	Total
Bangalore ..	1,964	103	807	956	64	1	8	250	213	4,365
Mysore ..	7,187	116	637	589	51	4	3	430	246	9,263
Kolar ...	950	208	1,009	1,085	81	2	8	67	560	3,970
Tumkur ...	1,758	59	589	992	146	..	15	180	670	4,410
Shimoga ..	946	330	610	225	164	3	3	75	383	2,739
Hassan ...	707	304	109	350	79	6	17	308	94	1,974
Kadur ..	731	109	66	65	125	1	9	82	98	1,286
Chitaldrug ...	648	16	375	241	247	0	2	72	477	2,078
Grand Total ..	14,891	1,245	4,202	4,503	957	17	65	1,464	2,741	30,085

APPENDIX VII.—Statement showing details of Breeding Bulls stationed in the different parts of the State for the year 1927-28.

Serial number	Head-quarters	Number of circuit bull	Number of miles travelled during the year	Number of stationary bulls	Number of halting places: During the year	Number of halting places: On each round	Number of days spent on tour	Number of Fresh cows covered: At head-quarters	Number of Fresh cows covered: On tour	Number of repeated coverings	Highest number of coverings during any one day	Daily average coverings	No. of cows if any which could not be covered on account of excessive numbers	Total No. of fresh coverings by each bull	Remarks
1	Bangalore...	...	...	No. 31	...	...	...	29	...	18	2	...	...	29	Died on 13th May 1928.
2	Do ...	...	...	No. 16	...	...	...	203	...	51	4	...	...	203	Died on 4th April 1928.
3	Dodballapur.	...	...	No. 1	...	...	...	50	..	10	4	1	...	50	
4	Kolar ...	...	...	No. 2	...	...	...	97	...	11	3	...	...	97	
5	Tumkur ...	...	...	Shivagangs	..	...	...	46	...	10	2	1	...	46	
6	Madhugiri...	...	...	No. 1	..	...	...	3	...	1	1	...	...	3	Sold on 12th August 1927.
7	Shimoga ...	...	..	No. 1	...	...	...	40	...	8	2	...	...	40	
8	Chikmagalur	...	...	No. 1	...	...	...	76	...	11	2	...	...	76	
9	Chitaldrug...	...	...	Big bull	...	...	..	27	...	5	2	...	...	27	Transferred to Jagalur on 24th November 1927.
10	Do ...	...	...	Small bull	...	...	...	159	...	14	3	...	...	159	
11	Jagalur ...	...	...	No. 1	..	...	...	67	...	7	2	...	...	67	
12	Hassan ...	...	...	New bull	...	...	...	77	...	14	4	...	22	77	
13	Do ...	...	...	Old bull	...	...	...	85	...	18	3	...	28	85	
14	Kolar ...	...	...	Buffalo bull	...	...	...	47	...	3	2	...	...	47	
15	Tumkur ...	...	...	Do ...	...	...	...	110	...	16	3	3	...	110	
16	Hassan ..	...	...	Do ...	...	...	...	95	...	30	3	...	...	95	

APPENDIX VIII.

C. V. D. 60]

RINDERPEST DAILY REPORT NO..... OF..... VILLAGE.....HOBLI.....TALUK.

Animal census :—Cattle..... Sheep and Goats.....

Source of infection..... Name of owner in whose house infection started.....

Date of commencement of outbreak.....

Date to which the report relates	Particulars of disease up to date of inoculation			No. treated (only among the uninoculated)	Dates of inoculation	No. inoculated on each day	Dates of hyper-immunisation	No. hyper-immunised on each day	Result among the inoculated and hyper-immunised								Whether the animals in Cols. 12 and 14, 16, 17 had been hyper-immunised; if so, dates	Results among the uninoculated subsequent to date of 1st inoculation			Date and brew of serum used	No. and date of virus	Average dose of serum used for 100 lbs. body weight	Remarks
	Attacks	Deaths	Ailing						Reactors within 4 days of inoculation	Deaths	Reactors between the 4th and 7th day	Deaths	Reactors between 7th and 14th day of inoculation	Deaths	Attacks after 14th day	Deaths		Attacks	Deaths	Ailing				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Course of the disease among the severe reactors before 14 days and attacks among the inoculated after 14 days.

Serial No.	Date of inoculation	Date of Hyper-immunisation	Date of reaction after Hyper-immunisation	Date of attack	Date of death	Remarks
1	2	3	4	5	6	7

Observations of the Veterinary Inspector.

WD 1543—GPB—700—6-3-29

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THE ANNUAL REPORT OF THE MYSORE CIVIL VETERINARY DEPARTMENT FOR THE YEAR 1927-28.

WITH THE GOVERNMENT REVIEW THEREON.

Government of his Highness the Maharaja of Mysore.

GENERAL AND REVENUE DEPARTMENTS.

G. O. No. D. 6425-83—C. V. 64-28-2, dated 22nd December 1928.

Report on the working of the Civil Veterinary Department.

Reviews the —— for the year 1927-28.

READ—

Letter No. Per. 45-28, dated the 20th November 1928, from the Director of Agriculture in Mysore, submitting the report on the working of the Civil Veterinary Department, during the year 1927-28, together with an introductory note by himself.

(Printed as annexure.)

ORDER NO. D. 6425-83—C. V. 64-28-2, DATED 22ND DECEMBER 1928.

Recorded.

2. The Civil Veterinary Department was re-organised during the year. A certain amount of decentralisation was effected by increasing the number of Divisional Officers from two to four so as to relieve the Superintendent of some of his routine duties, and also to ensure closer supervision of District work. Another very important measure was the establishment of the Serum Institute on a satisfactory basis. The Department seems to be gaining ground in the confidence of the people and securing an increasing measure of co-operation.

3. The seasonal conditions were on the whole favourable, though scarcity of fodder was experienced in some parts owing to lateness of the N.-E. Monsoon.

4. *Contagious Diseases.*—During the year, 1,186 fresh cases of rinderpest, 2,036 of anthrax, 463 of haemorrhagic septiciemia, 1,505 of blackquarter and 2,397 of other diseases were registered and the situation taxed the resources of the Department severely. The experience this year points to the imperative necessity for exercising effective control over the movements of cattle in infected villages and also to and from cattle fairs. It is also necessary to take measures for securing prompt and correct information of the occurrence of infectious diseases in villages. These questions are being examined by a Sepcial Committee and Government hope a decision will be reached at an early date.

5. The prevalence of rinderpest was unfortunately widespread during the year, mainly on account of the cattle dealers from the Madras Presidency purchasing at cheap prices large numbers of cattle from infected localities and marching them through the State *en route* to the British Territory. It was however a redeeming feature of the situation that the campaign of inoculation was pushed with vigour and was facilitated by an increasing realisation of its usefulness on the part of the people. It is reported that the spread of rinderpest was effectively checked by means of S. S. inoculation, 72,535 cattle having been so inoculated, only 2 of them being reported to have shown symptoms of the disease and that only in a very mild form. Active immunisation is how universally adopted in the State and the results have been very satisfactory. As the Veterinary staff was fully occupied in combating the spread of rinderpest, it was not possible for them to devote as much attention as could be desired to cases of anthrax and haemorrhagic septiciemia.

6. *Serum Institute.*—The Serum Institute was developed and placed on a satisfactory basis. The expansion of the inoculation work this year was largely due to the successful production of serum in the Institute. As the Director's review of the work of the Institute has already been recorded, it is unnecessary to dwell on it at greater length here.

No. D. 6425-83—C. V. 64-28-2, DATED 22ND DECEMBER 1928.

7. *Hospitals and Dispensaries.*—Six Dispensaries were opened during the year at Goribidnur, Gundlupet, Channarayapatna, Nelamangala, Hoskote and Sorab. The total number of Veterinary Institutions in the State stood at 45 at the end of the year. Orders have since been passed for the immediate opening of Veterinary Dispensaries at Devanhalli and Heggaddevankote. The generous offer of a building for the purpose at the former place by Mr. Yele Krishnappa has been thankfully accepted by Government.

It has been brought to notice that the equipment of Veterinary Dispensaries requires to be improved.

8. *Cattle Fairs.*—The Officers of the Department attended 75 out of 95 cattle fairs, and temporary dispensaries were opened at fairs wherever accommodation was available. The Director of Agriculture is requested to examine the present position in regard to the regulation of cattle fairs from the point of sanitation and safeguards against spread of cattle diseases, and submit proposals to Government regarding the measures necessary for minimising the dangers incidental to a large congregation of cattle from all parts of the country.

Government notice with regret that there is a serious shortage in the State's supply of breeding bulls, and think that the matter requires early and careful consideration. They have referred in their review of the Administration Report of the Amrit Mahal Department to the desirability of that Department concentrating its resources as far as possible on the production of breeding stock for improving the cattle of the raiyats; but this can only meet the situation partially, and it will still be necessary to take steps to provide a large number of breeding bulls from other sources. Government trust that the recently constituted Special Committee presided over by the Director of Agriculture will investigate this question thoroughly and furnish its recommendations.

Government are glad to note that the Department has worked satisfactorily during the year under review.

N. RAMA RAO,
Secretary to Government,
Development Departments.

To—The Director of Agriculture in Mysore.
The Revenue Commissioner in Mysore.
The Heads of Departments.
The Deputy Commissioners of Districts.
The Presidents of District Boards.

FXD.—P. S. R. N.

WD 1841—GPB—725—4-1-29.

INTRODUCTION.

The most important work of the Civil Veterinary Department during the year was its attempt to control our most serious cattle disease—Rinderpest. The establishment of our own Serum Institute has made possible the institution of a regular campaign of Serum Simultaneous Inoculation against this disease. If we can add to this some effective control over the movement of cattle, it should enable the Department to reduce our losses from this disease to a minimum.

A total of 72,535 animals were inoculated against rinderpest with the Serum Simultaneous Method during the year. Out of this total there were only 92 deaths which could be considered as due to lack of protection by inoculation. This works out at a little more than one-tenth of one per cent of the total which is so small a number as to be negligible. The information that serum simultaneous inoculation done in previous years protected animals during the attacks of the year under review gives us a certain feeling of security. However, unpublished information which has recently come to me seems to indicate that with young animals under two or three years of age the effect may not be so permanent as with older animals. I propose having this matter thoroughly investigated by the Department.

The effect of uncontrolled movement of cattle from infected areas on the outbreak of disease is clearly brought out in the report and it seems fairly obvious that even were we able suddenly to strengthen our staff very greatly we should continue to have serious trouble on this account. The recent appointment by Government of a representative committee to go into questions connected with the movement of cattle which are infected or have been exposed to infection should lead to some definite action to check this means of disease spread.

As to the question of strengthening the staff of the Department, this must, I think, depend largely upon the training of our own men. Unfortunately for two or three years no men were sent for training and we are now suffering from this. We have at present 27 men under training, so that the present shortage though unfortunate will be of temporary duration.

The questions of pay and prospects raised by the Superintendent are not ones, I feel, I can discuss here. From my own standpoint it is unfortunate that of the two reorganizations which have taken place during the past ten years one took place just prior to my taking over charge of the Department and the other during my recent long leave. I therefore had no opportunity of expressing my opinion on the matter on either occasion.

As to the other work carried out by the Department, it may be stated that if our Serum Institute is enlarged and strengthened, we should be able to manufacture most of the sera and vaccines required for the control of our more serious cattle diseases. That would undoubtedly greatly facilitate disease control work in the State.

The work of Veterinary Inspectors in the hospitals and veterinary dispensaries and on tour has shown an increase over the previous year and with an increase of the Assistant Superintendents to one for every two districts which came into effect at the beginning of the present year, we should have an increase of efficiency all round.

I wish to express my appreciation of the efficient work of Major Simpson and his staff.

L. C. COLEMAN.

THE ANNUAL REPORT OF THE MYSORE CIVIL VETERINARY DEPARTMENT FOR THE YEAR 1927-28.

Administrative Staff.

Major R. W. Simpson, Superintendent, was in charge for the whole period. Mr. K. Krishnaiengar, Assistant Superintendent, continued in charge of the Eastern Division, with his headquarters at Bangalore. Mr. K. N. Sreenivasan, Assistant Superintendent, also continued in charge of the Western Division for ten months, with his headquarters at Shimoga, when he availed himself of two months' privilege leave, and Mr. B. V. Venkatachar, Veterinary Officer, Bangalore, was appointed to act for him.

Seasonal Conditions.

The seasonal conditions were on the whole fair. There was a certain amount of scarcity of fodder and water in parts of the Madhugiri, Sira, and Tiptur Taluks in the Tumkur District; and in parts of Gundlupet, Yedathore, Malvalli, and Nagamangala Taluks in the Mysore District scarcity of fodder for two months owing to a late North-East monsoon was also keenly felt in the Chitaldrug District.

Contagious Diseases.

The year opened with 88 outbreaks of rinderpest, 33 of anthrax, 15 of haemorrhagic septicaemia, 477 of blackquarter, and 180 of other contagious diseases requiring attention.

During the year 1,186 fresh outbreaks of rinderpest, 2,038 of anthrax, 463 of haemorrhagic septicaemia, 1,505 of blackquarter, and 2,397 of other contagious diseases were registered.

The staff were only able to personally attend to 818 outbreaks of rinderpest, 425 of anthrax, 118 of haemorrhagic septicaemia, 1,503 of blackquarter, and 833 of other contagious diseases. In 1,613 outbreaks of anthrax, 342 of haemorrhagic septicaemia, 1,485 of other contagious diseases, instructions were sent to the Patels of villages concerned, instructing them of the precautions they should take and that they should report progress of disease.

Rinderpest.—At the beginning of the year under reference rinderpest was prevailing only in most of the Taluks in the Mysore District, in three Taluks in each of the Hassan and Shimoga Districts, and in two Taluks in the Kadur District, but during the course of the year it spread to every Taluk in the State, principally through cattle dealers from the Madras Presidency purchasing large numbers of cattle cheaply in infected areas and marching them through the State into British Territory. Although some of the cattle dealers were warned of the presence of rinderpest in the area in which they were purchasing cattle, they nevertheless continued to do so. Several outbreaks of rinderpest, 150 miles away, were subsequently traced to the infection carried by the cattle purchased by these men. Conditions were aggravated with the increased movement of cattle to and from Cattle Fairs. In areas where there is a Veterinary Inspector to each Taluk, the disease was promptly dealt with, and so kept in hand, but in areas where a Veterinary Inspector has more than one Taluk to attend to, the disease got out of hand, and this accounts for the unprecedented number of villages infected in the State. This bears out my repeated statements that it would be more economical in the long run to have a Veterinary Inspector to each Taluk, with a reserve of men to assist him in cases of emergency. It is of interest to note that though rinderpest again appeared during the year in several villages, where S. S. inoculation had been undertaken in 1925, only two of the S. S. inoculated cattle showed symptoms of the disease, and then only in a very mild form.

During the year, 72,535 animals were protected against rinderpest by active immunisation and 100 by passive immunisation. The number protected would have been larger had the supply of serum been equal to the demand. Active immunisation against rinderpest has been universally adopted in the State, and has given most satisfactory results. The people have begun to realise its efficacy, and those who refuse to produce their cattle for inoculation in the first instance, soon come to their senses, when they find their cattle dying, while the inoculated remain healthy.

The success attending this inoculation has undoubtedly brought the work of the Department into prominence, and has greatly helped to gain the confidence of the Agricultural population. It has been found more satisfactory to give a smaller dose of serum and have a slight thermal reaction, than to give a large block-out dose followed with no reaction, especially in cases where controls cannot be had, and the people are often indifferent as to whether the second injection is given or not. See Appendix VIII for the form used for collecting statistics showing the results of this method of inoculation.

Working in already infected villages, it must often happen, especially as the temperatures of all the cattle cannot be taken before inoculation on a large scale by one man and his assistant,—that animals already infected with the disease, get inoculated; so animals showing a reaction before 96 hours after inoculation, are considered as infected at the time of inoculation. From statistics collected, the following are the results of S. S. inoculation:—

Attacks and deaths from rinderpest in Villages where S. S. Inoculation has been undertaken		Number Inoculated	Result among the inoculated							
Attacks	Deaths		Reactors within 4 days of inoculation	Deaths	Reactors betewen 4th and 7th day	Deaths	Reactors between 7th and 14th day of inoculation	Deaths	Attacks after the 14th day	Deaths
1	2	3	4	5	6	7	8	9	10	11
15,449	6,822	72,535	459	73	2,357	40	1,254	29	140	23

The figures given in columns 6 and 8 include animals that have shown either slight or severe reactions. If the deaths, among the animals that reached within four days of inoculation, are not taken into consideration, the deaths among the inoculated work out to less than one per cent. When animals develop the disease after the 14th day after the first inoculation, it shows that inoculation has been a failure, and this is probably due to the virus being defective. Such cases are shewn as attacks after inoculation.

Total number of deaths from rinderpest, according to Cattle Mortality Returns received from Patels, is 14,891 against 12,321 of the previous year, but this cannot be taken as a correct figure, as 50 per cent of the Patels do not submit these returns regularly, and several of the Patels who do so, do not record all the deaths that occur. The number recorded could, without exaggeration, be doubled.

Anthrax.—Very little attention could be paid to this disease, other than sending written instructions to Patels of villages where there had been deaths, as the staff were fully occupied dealing with rinderpest.

Until the staff is considerably increased, it will not be possible to carry out preventive inoculation against anthrax on a large scale, and so reduce the high mortality from this source.

The Australian Spore Vaccine prepared by the Biological Institute of Australia, Sydney, continues to be used, and the results obtained among cattle so inoculated are very encouraging. There have been no further deaths from Anthrax on the Rayankere Dairy Farm, since the cattle were protected in February 1927, where, previous to this vaccination, deaths occurred at frequent intervals. Occasionally an animal develops anthrax from 24 to 96 hours after vaccination, but every such case has been promptly treated with an intravenous injection of the Muktesar anti-anthrax serum, and cured.

The mortality, after vaccination among sheep and goats, varies from 5 to 15 per cent, but as this is slight when compared with the high mortality from the disease itself in infected localities, the people think nothing of it, and are only too pleased to feel the remainder of their flocks are safe.

Experiments with the anti-spore vaccine were tried on horses and elephants. On horses it caused extensive œdematous swelling of the fore limb on the side inoculated, and so it has not been tried since on horses.

The Aggressin prepared by the Jensen Salsbery Laboratories, Kansas City, gave better results, and all the horses of the Mysore Military were during the year protected with it.

The anti-spore vaccine gave better results with Elephants. Seven were protected with it, and for 10 months there have been no further deaths among the elephants in the Shimoga District where previously deaths have occurred in the previous two years. The safe dose for a full grown elephant is 1·5 c.c.

The Aggressin prepared by the Jensen Salsbery Laboratories is to be tried on sheep and goats during the coming year.

Blackquarter.—Protective inoculation against blackquarter is becoming more and more popular every year in the State. Where formerly there was opposition to it, complaints are now made by the people if the staff do not promptly visit the villages to undertake inoculation. In areas subject to this disease, the staff now carry in their equipment bottles of anti-blackquarter serum in order to give intravenous injections without delay to animals found suffering from the disease. This treatment has been attended with great success, and has done much in enabling the staff to gain the confidence of the people.

For protective inoculation the Aggressin only is used. No harm is done by using the Aggressin where the disease exists if serum is available for intravenous injections in case the inoculated animals develop the disease.

The high mortality from anthrax and blackquarter is a considerable loss not only to the cattle owners, but also to the State, as it is only the better cared for and more valuable animals that appear to contract these diseases. This is the class of animal that is purchased by people outside Mysore, and so every animal thus lost, means so much less money coming into the State.

Unfortunately the Districts where these diseases occur periodically and cause such heavy mortality are poorly staffed, and in consequence protective inoculation can only be undertaken to a limited extent.

It will thus be seen that it would be really economical in the long run if the State spent more money in protecting more of these valuable cattle, which are a considerable source of income to the State. This can be done by increasing the staff considerably, by having at least a Veterinary Inspector in each Taluk with an ample supply of vaccine always in stock, so that all the young stock can be protected.

Haemorrhagic Septicaemia.—Very little attention could be paid to this disease. Of the 463 outbreaks registered during the year, only a hundred and eighteen received attention, owing to the area allotted to each Veterinary Inspector being too extensive to enable him to cope with the numerous outbreaks occurring in his area. Besides, sufficient funds not being provided, it was not possible to lay in sufficient vaccine to meet the large and continual demand.

Other contagious diseases.—Foot and mouth diseases spread to all the Districts in the State and were responsible for the high mortality in some of the Malnad Taluks. Sheep-pox as usual accounted for the heavy mortality among sheep in the Eastern Districts. Unfortunately, owing to the staff having rinderpest

and other outbreaks to deal with, very little attention could be paid to this disease. In one village in the Bangalore Taluk, cow-pox lymph was tried with satisfactory results. Parasitic diseases seem to be getting steadily worse, and are largely responsible for retarding the development of the young stock, and for the poor condition of the older stock. More attention should be given to these diseases, but with the present staff this is impossible.

Personnel.

The staff have, as a whole, done another year of splendid work, notwithstanding the fact that a number of them have had their constitutions undermined with Malaria, working in the unhealthy tracts of the Malnad.

Though Government were pleased to reorganise the Department by increasing the number of Divisional Officers by two, and by increasing the number of Inspectors in the first grade by four, resignations continue. This shows that the reorganization is apparently not sufficiently encouraging to temptmen to remain. There is also great discontent among the second and third grade Inspectors, as they have been badly hit by the reorganization. They now get yearly increments of only Rs. 4 as against Rs. 5, and by Government not giving these men an advanced increment this year, several of them will, according to the Mysore Service Regulations, not draw the pay they were entitled to under the old scale, before July 1930.

There is also much discontent among the lower subordinates, owing to their pay not being improved. At present they are the poorest paid men in the service and with no prospects. This results in their leaving just as they have learnt enough to be useful assistants to the Veterinary Inspectors. This unsatisfactory state of affairs greatly retards the smooth working of the Department. The people, who in consequence suffer, are the raiyats, as they do not get the same attention paid to their live-stock as they would if there was not this continual introduction of untrained and inexperienced men to assist the Inspectors, and to treat animals in the absence of the Inspectors from headquarters.

Five Veterinary Graduates from the Bengal Veterinary College, seven from the Madras Veterinary College and two from the Bombay Veterinary College, were entertained. Six Veterinary Inspectors resigned during the year of whom three had completed two years' service. Among these one was a Mysorean.

Six candidates were selected as Mysore stipendiary students to undergo a course of study in the Punjab Veterinary College, Lahore. This made in all 27 students in the Punjab Veterinary College and one in the Bombay College. The student in the Bombay College qualified in April.

The two Veterinary Inspectors deputed for a three years' training, returned in January, and have done some very useful work since.

Hospitals and Dispensaries.

Six dispensaries were opened during the year at Goribidnur, Gundlupet, Channarayapatna, Nelamangala, Hoskote and Sorab. This makes a total of 45 institutions in the State, but more are badly needed, and especially in those places where there is only one institution for two or more Taluks. These institutions serve a very useful purpose, as they are not only places where the raiyat gets his animals treated, but the meeting place of the raiyats when they visit the Taluk headquarters on business, and especially on the weekly bazaar days. Thus, if the Inspector makes the raiyats welcome and shows an interest in village matters, their cattle, etc., he invariably receives an invitation to visit their villages. Having thus gained their confidence, he gets immediate information of outbreaks of disease, and meets with no opposition in pushing preventive inoculation and the castration of scrub bulls.

Several of the older institutions still remain very poorly equipped, and such instruments that they do possess, are becoming useless through wear. Liberal grants are required for the re-equipment of these institutions. This state of affairs handicaps work considerably, disheartens the staff, and gives rise to complaints from the people.

Many of the instititutions are still located in very unsuitable buildings.

Most of the Local Bodies concerned have agreed to bear their quota for the erection of suitable buildings, but unfortunately Government have not seen their way to provide additional funds as the Provincial quota.

Mr. Yele Krishnappa of Devanhalli has constructed a substantial and imposing building at Devanhalli, and orders of Government are awaited for the opening of an institution there.

With the exception of the buildings at Tiptur and Channarayapatna, which two citizens so generously are erecting, the other citizens, who promised to erect buildings in different places, have not done so.

During the year Government have generously come forward to bear half the rent of the buildings rented for Dispensaries, where the rent had hitherto been borne entirely by the local bodies concerned.

Ninety-six thousand two hundred and four fresh cases were treated in Veterinary Institutions against 67,137 of the previous year, and 5,807 castrations and 6,145 operations were performed against 3,454 and 5,332 and respectively of the previous year. Yet these institutions are not being made as much use of by the people asthey should be. The reason is that those who have to bring their animals from a distance, can never be sure of finding the Veterinary Inspector at his institution, as he is more often away than at headquarters, dealing with the numerous outbreaks in the extensive area allotted to him.

If the assistants to the Inspectors were capable and experienced men they would, to a certain extent, be able to attend to the Hospital work during the Inspector's enforced absence, but as already stated, owing to frequent resignations, inexperienced and untrained men have to be employed.

Work done on tour.

The Veterinary Inspectors, again this year, have had very little time for systematic touring owing to the large number of outbreaks, but they nevertheless took full advantage of their stay while in villages attending to outbreaks, to do as much as possible for the raiyats by operating on and treating such animals that required attention.

The staff, while on tour, castrated 31,008 animals against 24,658 of the previous year; treated 25,811 against 17,190 of the previous year; and performed 521 operations.

Cattle Fairs.

Of 95 cattle Fairs held in the State, 75 were attended by the staff, and in those places where accommodation was provided, temporary dispensaries were opened. Several of the local bodies, responsible for the management of these fairs, did all they could to assist the staff in their work, and to minimise the breaking out of disease among the Cattle.

Rules and regulations are very necessary for the guidance of those responsible for the management of these Cattle Fairs, especially for private individuals who organise and run a few of them and whose one idea is to get some income for a Temple or for themselves, but have little regard for the spread of disease.

Breeding bulls.

There were twelve breeding bulls, and three buffalo bulls stationed in Veterinary Institutions.

The two bulls at Bangalore died during the year, and the bull at Madhugiri was sold.

Nine hundred and fifty-nine cows and 252 buffalo cows were served during the year.

At present there is a serious shortage of good breeding bulls in the State, owing to all the promising bull calves being purchased and taken out of the State. It is no exaggeration to say that the shortage of good breeding bulls will seriously affect the economical condition of the State in the near future. In a State like

Mysore with an extensive export trade in cattle, bringing in nothing less than half a crore of rupees yearly, it is a suicidal policy to neglect this important industry. Every endeavour should be made without delay to improve the breed by the free distribution of at least 5,000 young breeding bulls in villages that are prepared to maintain them as breeding bulls.

In order to retain these bulls, it will be necessary for Government to have a lien on them and so prevent them being sold and taken out of the State.

Conferences

Of the 44 District and Taluk Conferences held during the year, 38 were attended by the staff. Reports on the work done by the Department in districts and taluks, were read at these conferences. For the first time in the State, a Poultry Show was organised in connection with the Kadur Conference.

Jatka ponies.

With the advent of motor buses, Jatka conveyances have practically disappeared. A few still ply for hire between the Holalkere Railway Station and Holakere Town; French Rocks Railway Station and Town; and Chintamani and Kolar Towns. The ponies were examined twice during the year, and most of them were found totally unfit for use, but unfortunately the officers of the Department cannot take action against the offending Drivers, and the Police do not seem to think it their duty to do so. As things stand, these half-yearly inspections serve no useful purpose.

Examination of Bacteriological and Pathological Specimens.

The Department not having its own laboratory, specimens had to be sent to the Public Health Institute. Five hundred and fifty-five specimens were examined with the following results:—

No.	Items	Positive	Negative	Total
		Rs.	Rs.	Rs.
1	Piroplasmosis	64	353	417
2	Black-quarter	5	13	18
3	Anthrax	23	48	71
4	Hæmorrhagic Septicæmia	2	11	13
5	Jhone's disease	...	1	1
6	Glanders	1	4	5
7	Malignant Odema	5	..	5
8	Fibro Sarcoma Tumeours	2	...	2
9	Tuberculosis	...	1	1
10	Gonococci	..	2	2
11	Trypanosomiasis	2	3	5
12	Pathological Specimens	...	7	7
13	Urine	...	8	8
	Total	104	451	555

R. W. SIMPSON, Major,
Superintendent.

APPENDIX I.

Statement showing the work done in the Civil Veterinary Department during the year 1927-28.

Sl. No.	Particulars	Number
1	Number of fresh cases admitted to the institution	96,204
2	Total daily attendance for the year	2,06,359
3	Number of castrations performed in the institutions	5,807
4	Number of other operations performed in the institution	6,145
5	Number of cases treated on tour	25,811
6	Number of castrations performed on tour	31,008
7	Number of other operations performed on tour	521
8	Number of outbreaks of rinderpest pending on 1st July 1928	88
9	Number of outbreaks of rinderpest registered during 1927-28	1,186
10	Number of outbreaks of rinderpest attended to during 1927-28	818
11	Number of outbreaks of rinderpest where inoculation was totally refused ..	36
12	Number of outbreaks of Anthrax pending on 1st July 1927	33
13	Do do registered during 1927-28	2,038
14	Do do attended during 1927-28 {Personally ... / By written instruction	425 / 1,613
15	Number of outbreaks of H. S. pending on 1st July 1927	15
16	Do do registered during 1927-28	463
17	Do do attended to during 1927-28 {Personally ... / By written instruction	118 / 342
18	Number of outbreaks of black-quarter pending on 1st July 1927 ...	477
19	Do do registered during 1927-28 ...	1,505
20	Do do attended to during 1927-28 ..	1,503
21	Number of outbreaks of all other contagious diseases pending on 1st July 1927...	180
22	Do do registered during the year 1927-28 ...	2,397
23	Do do attended to during 1927-28 {Personally ... / By written instruction.	883 / 1,485
24	Total number of outbreaks that were detected {Personally on tour ... / By checking C. M. R. in Taluk Offices ...	346 / 3,357
25	Total number of outbreaks that were reported through C. V. D. 10 B .. / C. V. D. 10 C ...	2,033 / 1,653
26	Number of inoculations performed against rinderpest S. S. Method ... / S. A. Method ...	72,535 / 100
27	Number of inoculations performed against anthrax	6,697
28	Do do blackquarter	24,583
29	Do do Haem. Sept.	2,117
30	Do Vaccination against sheep-pox	178
31	Number of cattle fairs held	95
32	Do do attended by the Veterinary Inspectors	75
33	Do Taluk Conferences held	44
34	Do do attended	38

APPENDIX II.

Statement showing the number of outbreaks of Epidemic Cattle Diseases attended to in the State during the year 1927-28.

Area	Rinder-pest	Anthrax	Haem. Sept.	Black-quarter	Other contagious diseases	Total for 1927-28	Total for 1926-27
Bangalore ...	37	46	4	30	46	163	147
Anekal ..	11	44	4	25	36	120	120
Dodballapur ..	9	148	14	115	133	419	522
Hoskote ...	8	37	2	17	23	87	..
Channapatna ...	2	55	12	59	49	177	164
Kankanhalli ...	15	31	8	45	40	139	105
Magadi ..	8	46	5	26	43	128	116
Nelamangala ...	13	16	...	...	9	38	..
Mysore ...	53	122	23	76	73	347	399
Chamrajnagar ...	83	59	10	9	15	176	258
Gundlupet ...	13	24	4	1	2	44	...
Hunsur ...	66	47	10	78	94	295	295
Yedatore ...	31	19	13	16	112	191	127
Nagamangala ...	32	43	16	117	103	311	328
Malvalli ...	16	98	23	94	68	299	319
Tumkur ..	21	123	16	98	41	299	68
Madhugiri ..	19	35	7	35	63	159	445
Sira ..	4	18	5	14	37	78	65
Tiptur ...	10	28	7	43	84	172	328
Kolar ...	23	228	19	71	70	411	509
Chikballapur ...	11	37	11	84	51	194	205
Chintamani ...	4	98	17	57	34	210	266
Goribidnur ...	11	8	2	30	15	66	...
Kolar Gold Fields ...	...	7	1	7	2	17	7
Shimoga ...	3	74	3	9	72	161	231
Sagar ...	8	77	21	14	49	169	301
Sorab ...	3	...	...	...	...	2	...
Shikarpur ...	2	54	7	5	27	95	115
Channagiri ...	28	117	21	38	35	239	200
Tirthahalli ..	10	14	10	2	20	56	69
Chitaldrug ...	10	65	7	20	65	167	195
Davangere ...	23	14	2	22	21	82	111
Hosdurga ...	20	87	2	17	76	202	239
Challakere ..	9	17	..	17	86	129	108
Jagalur ..	20	17	3	20	29	89	49
Hassan ...	8	14	21	55	88	186	314
Saklespur ...	53	16	57	22	109	257	451
Arkalgud ...	16	5	5	20	47	93	160
Hole-Narsipur ...	13	2	8	27	52	102	204
Chennarayapatna ...	16	2	5	27	53	103	..
Arsikere ...	5	10	10	23	39	87	114
Chikmagalur ...	37	23	12	9	123	204	324
Tarikere ...	31	12	10	9	44	106	110
Mudigere ...	...	1	22	...	30	53	69
Koppa ...	4	...	1	...	10	15	...
Total for the year 1927-28	818	2,038	460	1,503	2,318	7,137	...
Total for the year 1926-27	1,100	2,211	504	2,405	2,437	...	8,657

APPENDIX III.

Statement showing the work done in each Veterinary Institution in the State, for the year 1927-28.

Area	Fresh cases admitted	Total attended	Castrations	Operations
Bangalore	5,765	13,328	153	748
Anekal	2,404	4,887	226	384
Dodballapur	2,165	3,704	164	186
Hoskote	450	1,104	41	32
Channapatna	2,322	6,143	213	193
Kankanhalli	1,008	3,625	57	73
Magadi	2,427	5,959	211	57
Nelamangala	366	1,011	25	40
Mysore	3,423	8,832	75	343
Chamrajnagar..	2,564	4,445	83	113
Gundlupet	2,047	2,451	3	14
Hunsur	2,031	4,978	145	59
Yedatore	1,105	2,273	104	55
Nagamangala	1,542	2,811	84	145
Malvalli	1,637	3,482	100	156
Tumkur	5,023	11,971	605	396
Madhugiri	2,069	3,754	338	265
Sira	2,589	5,223	157	160
Tiptur	5,008	7,645	221	102
Kolar	1,125	2,401	99	101
Chikballapur	1,933	4,239	101	222
Chintamani	2,473	4,812	104	68
Goribidnur	864	2,500	53	67
Kolar Gold Fields	1,910	5,516	94	128
Shimoga	3,645	7,573	104	223
Sagar	1,248	3,055	16	72
Shikarpur	3,322	5,951	75	164
Channagiri	3,036	7,134	57	113
Sorab	81	192	2	16
Tirthahalli	1,701	3,111	30	50
Chitaldrug	2,725	4,790	174	162
Davangere	1,936	5,439	122	71
Hosdurga	1,705	4,380	133	87
Challakere	2,327	3,624	247	42
Jagalur	814	2,219	48	29
Hassan	3,309	5,999	397	151
Saklespur	1,489	3,154	19	47
Arkalgud	1,603	3,234	103	93
Hole-Narsipur	2,680	5,197	267	149
Chennarayapatna	1,733	3,132	189	159
Arsikere	2,284	6,301	191	124
Chikmaglur	2,729	6,381	95	179
Tarikere	1,917	3,926	40	55
Mudgere	1,489	3,992	31	51
Koppa	181	473	10	1
Total ...	96,204	2,06,359	5,807	6,145
Total for 1926-27 ...	67,137	1,53,265	3,454	5,311

APPENDIX IV.

Statement showing the number of Inoculations done against Epidemic Diseases in the State during the year 1927-28.

Area	Rinderpest		Black-quarter	Anthrax	Haem. Sept.	Total 1927-28	Total 1926-27
	S. S.	S. A.					
Bangalore ...	3,048	...	...	590		3,638	2,484
Anekal ...	3,099	...	1,032	...	...	4,131	2,117
Dodballapur ...	1,360	...	1,273	37	...	2,670	4,211
Hoskote ..	855	...	725	...	...	1,580	...
Channapatna ...	112	...	2,404	325	...	2,841	4,527
Kankanhalli ...	2,807	...	1,457	335	..	4,599	2,393
Magadi ...	1,311	...	1,572	...	...	2,883	1,034
Nelamangala ...	662	...	...	...	...	662	...
Mysore ...	7,351	...	237	65	...	7,653	8,923
Chamrajnagar ...	5,178	...	892	...	...	6,070	6,966
Gundlupet ...	3,083	...	...	...	...	3,083	...
Hunsur ...	5,351	...	...	...	...	5,351	5,249
Yedatore ...	2,602	...	...	...	...	2,602	1,386
Nagamangala ...	5,331	...	1,194	103	...	7,018	4,904
Malvalli ...	862	..	1,910	...	...	2,722	2,998
Tumkur ...	2,481	...	7,868	1,114	...	5,463	3,459
Madhugiri ...	1,412	...	709	760	...	2,881	8,012
Sira ...	539	75	120	...	...	734	948
Tiptur ...	729	...	935	237	...	1,951	2,224
Kolar ...	1,807	...	448	1,327	...	3,582	3,029
Chikballapur ...	392	...	1,795	...	...	2,387	2,588
Chintamani ...	...	...	1,176	703	...	1,879	4,217
Goribidnur ...	659	...	146	...	...	805	...
Kolar Gold Fields ...	...	...	280	...	...	280	281
Shimoga ...	78	...	91	...	...	169	263
Sagar ...	412	...	..	...	...	412	1,185
Sorab ...	...	...	...	...	...	...	...
Shikarpur ...	659	...	132	164	205	1,160	617
Channagiri ...	1,910	...	123	...	...	2,033	1,533
Tirthahalli ...	727	..	...	...	70	797	1,351
Chitaldrug ...	1,055	...	504	...	...	1,599	2,635
Davangere ...	815	...	381	...	58	1,254	1,319
Hosdurga ...	1,623	...	216	...	...	1,839	1,815
Jagalur ...	1,180	...	135	350	...	1,665	951
Challakere ...	821	...	25	...	...	846	3,184
Hassan ...	1,227	25	409	154	...	1,815	5,427
Saklespur ...	1,398	...	534	152	1,255	3,339	3,899
Arkalgud ...	1,398	...	603	134	...	2,135	4,292
Hole-Narsipur ...	1,388	...	455	...	...	1,843	4,231
Channarayapatna ...	1,895	...	437	...	...	2,332	...
Arsikere ...	368	...	345	...	...	713	2,378
Chikmagalur ...	1,924	...	...	...	...	1,924	4,238
Tarikere ...	1,854	..	20	7	...	1,891	964
Mudgere ...	...	...	...	...	520	529	532
Koppa ...	62	...	...	...	...	62	...
Total for 1927-28 ...	72,535	100	24,583	6,697	2,117	1,06,032	...
Total for 1926-27...	24,498	24,555	50,521	5,952	2,238	...	1,07,764

APPENDIX V.—Statement showing the percentage of Cattle Mortality Returns received from the Patels during the year 1927-28.

Serial No.	Name of District	Percentage of Cattle Mortality Returns received from the Patels	Remarks
1	Mysore	67	
2	Bangalore	60	
3	Tumkur	75	
4	Kolar	76·5	
5	Shimoga	72·5	Average percentage of returns received for the whole State is 75
6	Kadur	80	
7	Hassan	61	
8	Chitaldrug	72	

APPENDIX VI.—Statement showing the Cattle Mortality in the State from Contagious Diseases during the year 1927-28.

District	Rinderpest	Hæmorrhagic Septicæmia	Anthrax	Blackquarter	Foot and Mouth	Surra	Red-water	Parasitic diarrhœa	Other contagious diseases	Total
Bangalore ..	1,964	103	807	956	64	1	8	250	213	4,365
Mysore ..	7,187	116	637	589	51	4	3	430	246	9,263
Kolar ...	950	208	1,009	1,085	81	2	8	67	560	3,970
Tumkur ...	1,758	59	589	992	146	..	15	180	670	4,410
Shimoga ..	946	330	610	225	164	3	3	75	383	2,739
Hassan ...	707	304	109	350	79	6	17	308	94	1,974
Kadur ..	731	109	66	65	125	1	9	82	98	1,286
Chitaldrug ...	648	16	375	241	247	0	2	72	477	2,078
Grand Total ..	14,891	1,245	4,202	4,503	957	17	65	1,464	2,741	30,085

APPENDIX VII.—Statement showing details of Breeding Bulls stationed in the different parts of the State for the year 1927-28.

Serial number	Head-quarters	Number of circuit bull	Number of miles travelled during the year	Number of stationary bulls	Number of halting places: During the year	Number of halting places: On each round	Number of days spent on tour	Number of Fresh cows covered: At head-quarters	Number of Fresh cows covered: On tour	Number of repeated coverings	Highest number of coverings during any one day	Daily average coverings	No. of cows if any which could not be covered on account of excessive numbers	Total No. of fresh coverings by each bull	Remarks
1	Bangalore...	...	...	No. 31	...	...	...	29	...	18	2	...	...	29	Died on 18th May 1928.
2	Do ...	...	...	No. 16	...	...	...	203	...	51	4	...	...	203	Died on 4th April 1928.
3	Dodballapur.	...	...	No. 1	...	...	...	50	..	10	4	1	...	50	
4	Kolar ...	...	...	No. 2	...	...	...	97	...	11	3	...	...	97	
5	Tumkur ...	...	...	Shivaganga	..	...	...	46	...	10	2	1	...	46	
6	Madhugiri...	...	...	No. 1	..	...	...	3	...	1	1	...	...	3	Sold on 12th August 1927.
7	Shimoga ...	...	..	No. 1	...	...	...	40	...	8	2	...	...	40	
8	Chikmagalur	...	...	No. 1	...	...	...	76	...	11	2	...	...	76	
9	Chitaldrug...	...	...	Big bull	...	...	..	27	...	5	2	...	...	27	Transferred to Jagalur on 24th November 1927.
10	Do ...	...	...	Small bull	..	...	...	159	...	14	3	...	...	159	
11	Jagalur ...	...	...	No. 1	..	...	...	67	...	7	2	...	...	67	
12	Hassan ...	...	...	New bull	...	...	...	77	...	14	4	...	22	77	
13	Do ...	...	...	Old bull	...	...	...	85	...	18	3	...	28	85	
14	Kolar ...	...	...	Buffalo bull	...	...	...	47	...	3	2	...	...	47	
15	Tumkur ...	...	...	Do ...	...	...	...	110	...	16	3	3	...	110	
16	Hassan ..	...	...	Do ...	...	...	...	95	...	30	3	...	...	95	

APPENDIX VIII.

C. V. D. 60]

RINDERPEST DAILY REPORT NO..... OF..... VILLAGE..... HOBLI..... TALUK.

Animal census :—Cattle..... Sheep and Goats.....

Source of infection..... Name of owner in whose house infection started.....

Date of commencement of outbreak.....

Date to which the report relates	Particulars of disease up to date of inoculation			No. treated (only among the uninoculated)	Dates of inoculation	No. inoculated on each day	Dates of hyper-immunisation	No. hyper-immunised on each day	Result among the inoculated and hyper-immunised								Whether the animals in Cols. 12 and 14, 16, 17 had been hyper-immunised, if so, dates	Results among the uninoculated subsequent to date of 1st inoculation			Date and brew of serum used	No. and date of virus	Average dose of serum used for 100 lbs. body weight	Remarks
	Attacks	Deaths	Ailing						Reactors within 4 days of inoculation	Deaths	Reactors between the 4th and 7th day	Deaths	Reactors between 7th and 14th day of inoculation	Deaths	Attacks after 14th day	Deaths		Attacks	Deaths	Ailing				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Course of the disease among the severe reactors before 14 days and attacks among the inoculated after 14 days.

Serial No.	Date of inoculation	Date of Hyper-immunisation	Date of reaction after Hyper-immunisation	Date of attack	Date of death	Remarks
1	2	3	4	5	6	7

Observations of the Veterinary Inspector.

WD 1543—GPB—700—6-8-29

GEN. SECRETARIAT.
21 NOV. 1928
DEVELOPMENT BRANCH.

Section B. V.
File No. 64-28
Serial No. 2a
No. 5299 (File of Govt Press)

Diary No. of letter replied to.....

General and Revenue Secretariat
( )
the *192*

To The Superintendent
Govt Printing
Bangalore

Date of issue 21/11/28

Signed by M V S Sastry

Sir,

I am directed to forward herewith a Copy of the Administration Report of the Civil Vet. Dept for 27-28 for being set in type and printed Copies kept ready for being bound along with the Govt Review. Proofs of the same will be sent to you in due Course. In the meantime, the Proofs of the Report may be sent to the Supdt. C.V.D for approval.

I have etc

21.11.28

for Secy to Govt
Dev Dept

List of enclosures.....

Copied by .....

Examined by .....

WD0325—GPB—30,000—26-5-27

5-245 of 21/11/28
Copy with Dr of Agri. with compliments
B.G.
for Dr. Secy.

Appendix F 64—1

33

SUBJECT.....

.....

.....

Section CW

File No. 64-28

Serial No. 3

No. P.O. 1982 enclosures

S.O. 26/3

Diary No. of letter replied to.....

General and Revenue Secretariat

( )

the *192*

To The Secretary

The Hon'ble the Resident

in Mysore

Date of issue 27-3-28

Signed by Asst. V. Ramana Rao

Sir,

I am directed to forward

herewith four copies of the

Annual Report of the Mysore

C.W. Deptt for the year

1927-28 with the Govt. Review

thereon.

List of enclosures.....

I have &c

Copied by.....

S.O.
25/3

Examined by.....

for Secretary

Dev. Dept.

over

VD 0399—GPB—20,000—18-9-28